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CHILTON'S

IRON AGE

MANUFACTURING MANAGEMENT

July 5, 1985

YES, BUT ONLY IF THE CONSUMER KEEPS BUYING

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JULY 5, 1985 VOL. 228, NO. 13

CHILTON'S
IRON AGE
MANUFACTURING MANAGEMENT

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Chilton

At midpoint 1985, the American consumer stands poised like Atlas. On his shoulders rests the U. S. economy.

Will he continue to be the strong man? Or, will he shrug?

A shrug could tumble the economy into a recession. Some analysts contend the economy is already perilously close to being in one.

And business executives in some industrial goods lines say they have already crossed the dark threshold of recession.

It's that kind of an economy at mid-1985. Autos look good. Appliances look good. Housing looks good. But many lines of industrial equipment — and even computers —are in the doldrums.

"The consumer is the only one who can pull the economy from the precipice right now," said one economist. "He's the only one out there with the money to spend and the guts to borrow more. He's the one on a roll. He's the hot hand."

And lately — on May 17 to be exact — the consumer was given a hypo that may give him the extra push he needs to do the job everybody is looking for him to do.

That date was when the Federal Reserve Board lowered the discount rate to 7.5 pct from 8¼pct — the lowest such rate in 7 years.

Of course, not only the consumer, but the entire economy was given a hypo by the May 17 rate cut.

The Fed's action is important for two reasons: For one, it could, in time, spur an economy that has seriously slowed. Second, the cutting of the rate was a symbol of great economic hope. The cut announced to the country that the Fed is determined to keep the economy on a strong growth track.

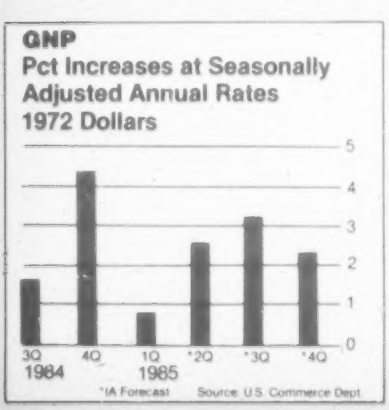
The discount rate, the interest rate the Fed charges on loans it extends to commercial banks and savings institutions, is a key one in the economy. If banks can borrow cheaper, then they can charge less interest on the loans they make to business borrowers and consumers

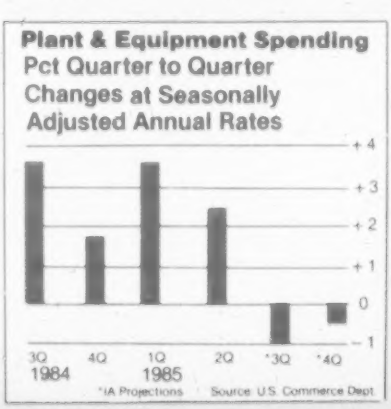
Questions Raised.

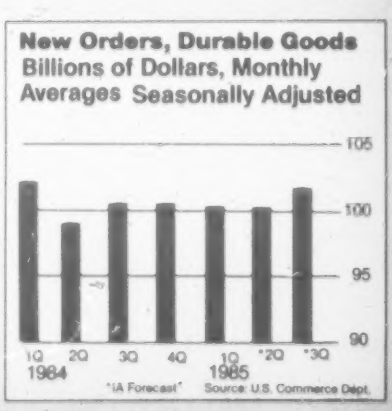
Still, there are reservations on the likely impact of the discount rate reduction.

Consumers may be in too deep a

(Cont. on p. 23)







debt hole to pick up their buying. Too, the rate cut may be too little too late for many troubled manufacturing industries.

However, those reservations have been countered by some analysts. For example, one asked, "Who is to say interest rates won't go down and down and bring on a powerful resurgence in the economy now beyond our wildest hopes?"

A prime rate of 8 pct or less has been predicted for this year by at least two leading economists. If that rate — or an even lower one — does prevail, then a lot of the reservations now being sounded about the economy will be washed away.

What has happened that thrust the consumer into a starring role in the Hope-for-a-Resurgent-Recovery drama? Why is corporate America playing a minor role?

It doesn't take any long list of data to find answers to these questions.

In the first quarter, the economy grew at an annual rate of 0.7 pct. Consumer expenditures, as an element in that economy, grew at a 5.2 pct rate. In the same period, the growth rate of government spending — Federal, state and local — *fell* by almost a 2 pct rate. Business investment in new machinery and equipment *fell* by a 2.6 pct rate.

A one-quarter flip-flop?

Not so. The turndowns in government spending and business investment represent low points in declining growth rates that started following the second quarter last year. In the face of these bumps down a ladder, consumer spending over the same time span continued to grow.

King Consumer

In the face of the weakness in the business sector, clearly, the consumer has been marching to another beat.

On top of all his prosperity relative to other sectors of the economy, it must be remembered that the consumer accounts for 67¢ out of every dollar expended in the economy. He's now called Atlas for good reasons.

Record-high employment and income levels have raised the spirits of consumers. Surveys show consumer attitudes at near-record levels.

In fact, there are two related consumer-optimism trends that downright worry a growing number of economists. The self-assured consumer has been very willingly piling up debt at a record pace to sustain his buying. At the same time, he has been drawing heavily on his savings.

At the close of the first quarter, consumer installment debt totaled $477 billion. That was an all time high 15.1 pct of total personal income.

The borrowing still has not seemed enough for consumers. Their savings, as a percent of after-tax income, fell to 4.5 pct in the March period. That was down from rates of over 6 pct for the two previous quarters.

Is It Bad News?

This picture of high debt and low savings has led some observers to foresee the consumer very shortly hitting a debt wall. Then they see all the consumers' bubbly attitudes and big buying coming to an abrupt end.

The growing number of economists who hold that vision of the consumer situation are forecasting a growth recession for the last half this year. A growth recession comes about when the economy does not expand strongly enough to sustain employment levels — any growth rate less than about 3 pct.

But that doesn't have to happen. One reason it doesn't is that if interest rates go even lower, as some foresee, than a second major benefit of lower rates will come into play.

Lower rates will mean that investment in this country will become less attractive to foreigners. After all, rates of return in the U. S. will not be much above those worldwide. The resulting drop in demand for U. S. dollar holdings would lessen the strength of the dollar. And if that happens, prices of imports for Americans will rise and prices of U. S. exports to foreigners will decline.

That entirely possible scenario would mean that U. S. consumer expenditures for imports would fall off, and much of that buying would turn homeward. At the same time, of course, exports of U. S.-made goods would be cheaper to buy in world markets.

A Big Lift

Any such buying shift would be a great big plus for U. S. business. After all, in April, the U. S. trade deficit totaled $11.8 billion. That means this deficit, for the first 4 months this year, ran some 5.4 pct ahead of the blistering deficit pace over the same time span last year. In 1984, the trade deficit came to a record $124 billion, with the manufactured goods share of the deficit coming to $88 billion, also a record.

Too, the dollar-easing possibility is reinforced by a recent projection that points to the U. S. economic growth rate coming into better alignment with the growth rates of America's leading world trading partners as the year goes on.

Last year, the U. S. economic growth rate was much stronger than for any of this country's top six trading partners.

The prospering U. S. market thus became Target A for those, and other, world competitors.

Now comes the forecast of the Organization for Economic Cooperation and Development for 1985. This forecast shows U. S. growth exceeding the average growth of these other nations by a 0.3 percentage point. Last year, U. S. growth ran ahead by a staggering 3.3 percentage points. Clearly, that was an open invitation to an import flood.

On balance then, lower interest rates will likely spur consumer buying anew in the last half of the year. Also, importantly, more of that buying will likely be for American-made goods as the dollar's exchange value weakens and makes imports costlier.

This chain of events points to some pickup in business volume for U. S.'s many battered manufacturing industries. Business will be better than in the first quarter this year, but won't be anywhere near up to last year's solid showing. □

STEEL

The steel market isn't collapsing.

That much can be said with reasonable certainty. Mill orders were drifting downward in late June, but with a large portion of the July tonnage in hand, there was no sign of the sharp downturn that took place in the second half of 1984.

There was no sign, either, that demand was going to move up to profitable levels. Steel analysts were holding to projections that called for shipments to go from 19.5 million tons in the second quarter to 18.5 million tons in the third quarter.

This was hardly a bright prospect, but it was a lot better than what happened in 1984. Last year, steel shipments fell from over 20 million tons in the second quarter to 17 million tons in the third quarter. There was a further slide last year to 16 million tons in the fourth quarter.

The current predictions were consistent with summer bookings. However, the bookings didn't extend far beyond July and early August. For anything later, the mills had to rely on judgments about the domestic economy and international trade.

One important judgment was that neither end users nor service centers have built the surplus inventory that helped produce the downturn in 1984. The inventory calculation involved some guesswork because there is no firm information on import tonnage for May and June.

A second element in the market equation was consumption. The mills assume that around 96 million tons of steel will be consumed in the U.S. this year. The auto companies are expected to continue chewing up large quantities of steel although their orders have started to reflect the seasonal slowdown.

Construction activity is seen holding up, but the steel requirements of machinery builders are lagging. The net effect of the various market movements will probably be a slight drop in the consumption rate.

If all goes well, this will be more than offset by declining steel imports in this second half. Under the Reagan Administration's voluntary restraint program, steel imports are supposed to fall from a record 26 million tons in 1984 to around 21 million tons in 1985.

In the first four months of 1985, there was no real decline in imports. Steel entered the country as fast as it did in 1984. It looked as though the first half total would be around 12 million tons.

That would be the same as the 1984 first half total. In 1984, however, imports rose to nearly 14 million tons in the second half of the year. In the current year, imports should come down to 10 million tons in the second half. That would be a drop of 2 million tons from the first half of this year and 4 million tons from the second half of 1984.

One new factor in the market picture is the uncertain labor situation. In recent years, the largest steel companies bargained jointly with the United Steelworkers of America, (USWA). This has produced peaceful settlements since 1959.

Before and after the 1983 bargaining, a number of smaller mills were able to negotiate contracts that were less costly than the pattern of the joint group. This led the biggest companies to demand equal treatment from the Steelworkers and eventually brought on the end of coordinated bargaining. The no-strike agreement, once part of steel bargaining, ended prior to 1983 talks.

No one knows what will happened when steel labor contracts expire in 1986. At one time the approach of a steel strike deadline brought massive 'hedge' buying by users. Users would begin to line up steel the year before the deadline.

Neither end users nor service centers have built the surplus inventory that helped produce the downturn in 1984.

Steel Shipments
In Millions of Tons

Source: AISI
*IA estimate

NONFERROUS

The third quarter, with its usual seasonal factors, isn't expected to make things easier (for nonferrous metals).

Nonferrous Metals Shipments
In Millions of Short Tons

Source: American Bureau of Metal Statistics, Aluminum Assn.
*/A estimate

Industrial consumption of base nonferrous metals still was running at a fairly good clip during the second quarter, but the metals producers were nowhere nearer cashing in on it, in terms of better prices, than they were at the start of the year. And the third quarter, with its usual seasonal factors, isn't expected to make things any easier.

Prices for primary aluminum and copper turned easier on the hedge markets more than halfway through the second quarter, while lead prices slipped and zinc steadied.

One of the problems for the aluminum producers has been that production worldwide wasn't coming down fast enough. Going into the second quarter, the producers were still pouring metal at a rate only 5.5 pct under the 1984 peak set last June. U.S. primary ingot output in the first half was down 10 to 12 pct, but production elsewhere ran just about on par with the same 1984 period. The industry's current inventory problems began when facilities were reactivated too fast during the early 1984 recovery.

The U.S. smelters accounted for about half of last year's 16 pct jump in primary ingot production worldwide. This year, their domestic facilities have accounted for the bulk of the cutbacks. European production was down, but this was offset by increased production in Australia, Latin America and South Asia.

U.S. aluminum shipments were down about 7.5 pct in the first quarter. Though incoming orders were off the 1984 pace, they still were ahead of shipping volume. By midyear, bookings were 5 pct to 6 pct ahead of 1984, but the main buying interest was centered on ingot and extruded products, neither of which rank high on the value-added scale.

Better shipping volume and a downtrend in hedge market inventories didn't help copper prices much during the first half either. Prices began retreating late in May, canceling out another brief rally and once again delaying the long-expected response to favorable longer term fundamentals. Copper imports were down about 32 pct in the first quarter, reversing the 1983-84 trend. Shipments by U.S. refineries in the first third of the year were ahead nearly 5 pct.

Hedge market values, meanwhile, were being depressed by anticipated liquidation of nearby long positions on the N.Y. Commodity Exchange during the final weeks of the first half, as well as by the seasonal drop in industrial demand. There also was some concern about the effect of continued high rates of imports of copper and brass mill products on the shrinking base of domestic copper and brass fabricating capacity.

Zinc shipments are up smartly this year, reflecting better demand for die casting grades, particularly in the automotive sector where zinc is pushing to recover applications lost to plastics and aluminum. Demand for galvanizing grades also was firmer. Domestic slab zinc production is up this year, but smelters' inventories trended downward, nonetheless, to a level generally under average monthly shipments.

Shrinking inventories of nickel on the LME and in producers' hands helped push the LME nickel price from $2.17 at the end of 1984 to nearly $2.60 a lb by late May—an increase of nearly 20 pct. In terms of sterling, however, the LME price was up only 8 pct.

U.S. stainless steel producer shipments, however, were off only minimally earlier this year. This has reinforced the expectations of the nickel suppliers that demand should hold up fairly well in the U.S. and Western Europe this quarter.

AUTOMOTIVE

Automakers predict that both sales and production of domestic cars will drop from 2.2 million units in the second quarter to 1.9 million in the third quarter. Sales of imported cars, however, likely will hover around the 700,000-unit mark in both quarters.

The slower sales of domestic cars in the third quarter combined with nearly full-capacity production will raise dealers' inventories. Dealers had about 50 days' supply of domestic cars at the end of the second quarter; that will rise to about 65 days' worth at the end of the third quarter. As the Japanese increase shipments of cars to the U.S., dealer stocks of imports also are expected to rise—from about 30 to about 40 days' worth in the same period.

Automakers relied heavily on low-interest (generally 8.8 pct) financing to attract buyers in the second quarter. They could continue such discounts in the third quarter. A slight drop in the prime interest rate also has made consumers feel that now is a good time to buy a car.

The University of Michigan's Institute for Social Research (ISR) reports that consumer confidence continues to be at all-time highs. The years 1984 and 1985 will be "the most favorable two-year period for consumer confidence since the mid-1960s," said Richard T. Curtin, head of the ISR's Survey of Consumer Attitudes.

The Michigan survey concluded that 63 pct of American families feel that conditions are favorable for buying a car. Many of the people surveyed mentioned the availability of lower-interest loans for car purchases plus discounted car prices.

The automakers themselves, however, are less sanguine about consumer confidence.

Another big uncertainty continues to be the Japanese. With the end of the voluntary restraint agreement (V.R.A.) at the end of March, the Japanese began shipping more cars to the U.S. Japanese Prime Minister Nakasone commanded the Japanese automakers to limit U.S. exports to 2.3 million units between April 1, 1985, and April 1, 1986. But U.S. automakers aren't sure that their Japanese competitors will do that.

"I expect the Japanese to ship 2.5 million cars in 1986," said one automaker's economic analyst. "Others expect them to ship as many cars as their distributor network can supply: 2.7 million.

"If the Japanese continue to increase their automotive exports at the same time the U.S. economy slows down, I expect trouble. If the Japanese grab a larger market share of the auto industry here while their overall trade imbalance with the U.S. grows, I think that President Reagan will be forced to act."

Some expect the Japanese to continue increasing their exports here later this year and next year—even if the U.S. economy falters. Others believe the Japanese will avoid a confrontation and reduce exports if the U.S. economy slows.

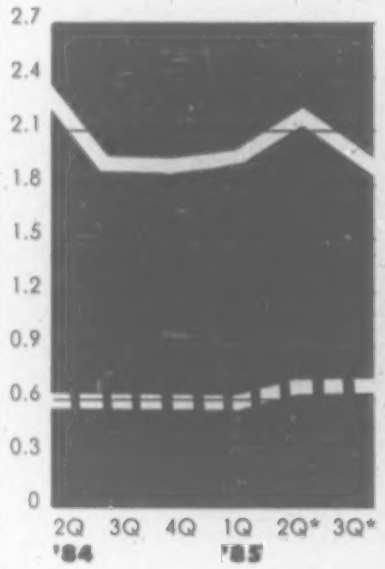
Despite the increased Japanese imports, automakers have not begun an all-out price war. "The leading Japanese automakers—Toyota, Nissan, and Honda—are in no rush to start a price war," said one analyst. "They prefer the higher profits of the higher prices. A price war would most likely be started by the smaller Japanese firms as they take advantage of the end of the V.R.A. to increase their market share here."

On the other hand, the analyst noted, "if American consumers think that the influx of Japanese cars has lowered car prices generally, they'll buy not only more imports—but more domestic vehicles as well."

Both sales and production of domestic cars will drop ... to 1.9 million in the third quarter.

Automotive Sales

In Millions of Units



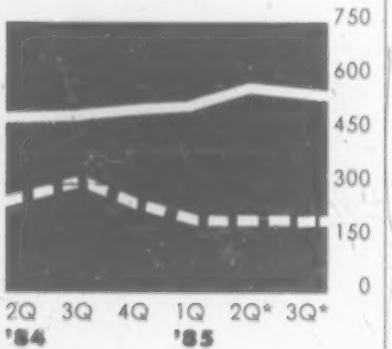
Source: Motor Vehicle Manufacturers Assn.

*IA estimate

MACHINE TOOLS; FLUID POWER

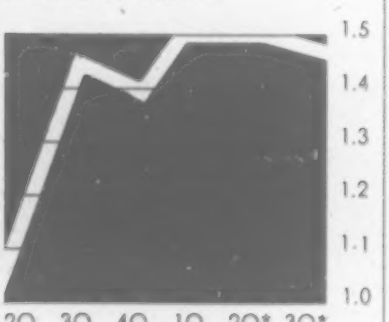
All in all, machine tool builders are optimistic about 1985 and beyond.

Machine Tools
Net New Orders
In Millions of Dollars



Source: National Machine Tool Builders Assn.
*IA estimate

Fluid Power, Shipments
In Billions of Dollars



Source: U.S. Department of Commerce and NFPA
*IA estimate

MACHINE TOOLS—Some machine tool executives believe the industry has peaked in terms of sales for this business cycle. The second half will not be significantly better than the first half.

There is one source of optimism. Detroit. "We've got enough business from GM alone to keep us going at near capacity for at least two years," says one industry leader.

Other U.S. automakers are busy retooling for the next generation of cars and several builders report excellent inquiry and order levels.

While many feel the total American market for American builders has permanently shrunk and perhaps is destined to shrink even more, others note that U.S. machine tool companies that have survived the assaults from offshore are destined to end up with the most profitable portions. "The large systems—the FMSs and automated factory systems which will be used here—will almost entirely be built by domestic builders," predicted one industry expert. "The competitive factors involved in these large systems have far less to do with price than in the case of stand alone machines. The issues are technology, operational success and maintenance. There's no reason at all why U.S. builders can't beat any foreign builder in all these areas, with cost contained of course."

Meanwhile, there are more and more signs that foreign builders are going to increase their presence in the U.S. market. Several companies are up for sale and at least two or three old line names in the industry may be under new ownership before the year is out.

All in all, machine tool builders are optimistic about 1985 and beyond. This is because the major contractions and rearrangements are probably done.

FLUID POWER—Sales of fluid power equipment have slipped since January and are now running below earlier forecasts. A strong auto market, stronger than some sources had expected, hasn't been enough to offset a slow capital goods market.

Materials handling, for example, has been a comparatively good investment sector. Yet one supplier to the lift truck industry pointed out that the impact of imports has skimmed much of that gain away.

The second quarter appears to have run flat, despite a few gains in seasonal industries.

What concerns more and more observers is that the second quarter may be duplicating the first quarter decline, even with the unexpected strength from auto market.

Fluid power normally enjoys less of a third quarter dropoff than most metalworking industries. So it should hold at a little under the $1.5 billion quarterly average in the first half of this year. Mobile equipment continues to be the weak area. Heavy trucks had been a strong factor through 1984, and deliveries continue to be pretty good, but forecasters now warn that this market, also, is beginning to slip.

As one source put it, "The whole market has moved under original plan and has been almost since the first quarter." At the moment, there seems no reason to expect any significant recovery. Usually, fourth quarter shipments give a little boost to the figures toward the end of the year, but even that has been discounted in some forecasts.

Pneumatic systems, always more volatile than hydraulics, have been tracking at about the same curve as the larger hydraulic market. Some pneumatic suppliers, who had been running at a solid level in second quarter, began to report new softness as June began.

COATINGS; PLASTICS

COATINGS—Industrial coaters expect to ship 86 million gallons in the third quarter. That's fewer than the 89 million gallons they shipped in the third quarter of 1984—and fewer than the estimated 90 million gallons they shipped in this year's second quarter.

The automotive and coil-coating markets were the two markets with the most growth in the first half of this year. "Coil coatings did much better than I expected in the second quarter," said the vice president of one major coater. "Unfortunately, that might have been just a temporary glitch. Coil coating could drop off again later in 1985." Auto sales also will drop off from the second to the third quarter.

Household furniture and business machines were the weakest markets for coatings in the second quarter, said the executive. "There was an oversupply of business machines," he said. "But that market could come back by the end of this year." Metal buildings were another soft market, he said.

Underhood auto components used about 5 pct more coatings in the second quarter this year than in the same period last year. Aluminum extrusions were another growing market for coatings.

But overall, the coaters predict that the rest of 1985 will continue to register fewer sales than in 1984.

"I don't foresee a lot of exciting developments for coatings in the basic industries," said one executive. Farm equipment, one of his company's major customers, will continue to have declining sales in the third quarter, he said.

"I foresee an 8 pct dropoff in sales for the coating industry from 1984 to 1985," said one vice president. "That's the problem with following a record like 1984: It's hard to beat it."

PLASTICS—The plastics industry fell short of its 40 billion lb goal of the sale and captive use of resins in 1984, but only by 0.62 pct. This year, the industry is off to a very good start and, unless something disastrous happens, a 40 billion lb market will be no problem at all.

Actual performance of plastics during the first quarter of this year ran slightly ahead of *Iron Age's* previous prediction. This year's first quarter ran ahead of the same period last year by 6 pct. However, these figures take into consideration the many commodity resins consumed by the apparel industry.

Emerging strongly are engineering plastics and composites, both of which are strong contenders for parts in the metalworking industry. In 1984, 1.1 billion lbs of engineering and specialty plastics and resins materials were sold in this country, an 18 pct increase over 1983 sales.

In the composites field, 2.15 billion lbs of materials were sold. That was a 12 pct increase over shipments in 1983. The big user industries are automotive, construction, corrosion-resistant equipment and the marine industries, with respective increased shipments of 18, 6, 11 and 12 pct. Aircraft and appliances were both up by 16 pct.

According to one producer, the leading grades of engineering plastics in terms of consumption during 1984 were:

—Nylon (403 million lbs consumed in 1984),

—Polycarbonate (300 million lbs),

—MPPE (175 million lbs),

—Acetal (58 million lbs) and

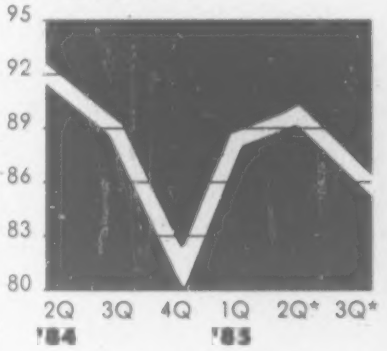
—Thermoplastic polyester (55 million lbs).

In the third quarter, sales of engineering plastics and composites will continue to grow at rates much faster than plastics in general.

Automotive and coil-coating were the two markets with the most growth in the first half.

Industrial Coatings Shipments

In Millions of Gallons

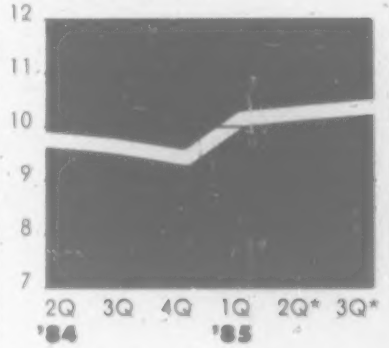


Source: U.S. Department of Commerce

*IA estimate

Plastic Resins Sales & Captive Use

In Billions of Lbs



Source: SPI Committee on Resin Statistics as compiled by Ernst & Whinney

*IA estimate

COMPUTERS; INSTRUMENTS & CONTROLS

COMPUTERS—In past years, a 20 pct annual growth rate for the computer industry was regarded as inevitable. This year, that string is about to be broken.

It appears that the industry will slip to a growth rate of 15 pct in 1985. This slippage was particularly acute in the second quarter, when several firms announced flat sales.

The slowdown has reached all major segments of the market: mainframes, minicomputers, and microcomputers, including personal computers. Across the board, it seems that the industry is pausing to collect its breath. Firms, deluged with incompatible personal computers, are re-examining their corporate information strategies.

Families are reassessing the value of a home computer. The home market, in particular, has fallen off sharply in recent months.

Sales of the higher priced computers, the mainframes and the minis and superminis, also are suffering as companies make major cutbacks in capital spending. In April, for example, businesses cut capital expenditures by .7 pct.

Mainframe sales, which have been the slowest moving segment of the computer industry in recent years, continue to fall off. Minicomputers, high-selling items until recently, have suffered sharp sales reversals, as firms put automation expansion plans on hold.

Computer manufacturers are hopeful that sales in the second half will pick up, although several see little growth until the fourth quarter. Reportedly, by that time, companies that have delayed their capital spending, will take expansion and modernization plans off hold to meet consumer needs, which remain strong. Second half improvements, however, will not not completely overcome a sluggish first half.

INSTRUMENTS—The outlook continues to be favorable, but with the strong rate of growth of recent quarters moderating somewhat, reflecting a weakening trend in the general marketplace (the first quarter economy grew at a 1.3 pct annual rate after inflation).

The strongest driving force in this product sector's economy is the need to replace instruments and controls due to the obsolescence by technology rather than due to age.

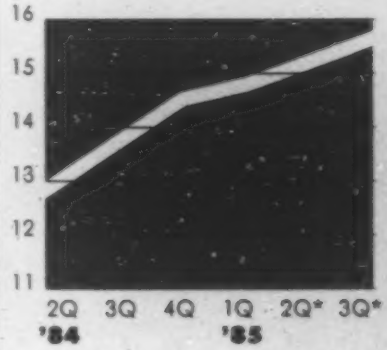
There are many factors influencing this market. The programmable controllers and microcomputers are vastly increasing the capability of devices to measure and control processes. The devices are more accurate, operate at greater rates, are much more responsive, and, where they are programmable, more versatile. The end result is strong desire for modernization and upgrading of facilities to improve productivity to remain competitive.

The computer is also enabling industry to pursue simulation at the computer-aided engineering stage to a greater extent than ever before. Simulation techniques allow users to design, construct and test components, for example, on the CRT screen without going through the time and expense of building a prototype for testing and evaluation. In keeping with the trend to 100 pct inspection of manufactured parts, the demand for new technologies equates to increased demand for the latest developments in instruments and process controls for on-going measurement and testing at every step in the production process.

Despite high employment and high consumer confidence and falling interest rates, demand appears to be slackening, momentarily at least, from the increase of 6 pct throughout 1985 projected last year by the U.S. Commerce Department.

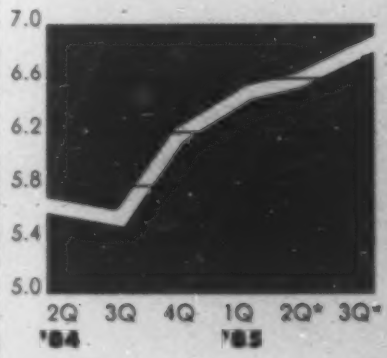
Computer manufacturers are hopeful that sales in the second half will pick up.

Computers
Shipments
In Billions of Dollars



Source: U.S. Department of Commerce
*IA estimate

Instruments & Controls
Shipments
In Billions of Dollars



Source: U.S. Department of Commerce
*IA estimate

TUBULAR GOODS; MINING EQUIPMENT

TUBULAR GOODS—Uncertainties plague the oil country tubular goods industry, which, to the chagrin of domestic manufacturers, remains dominated by imports.

One of the largest unknowns concerns the effect of the two-year agreement limiting pipe and tube exports that was reached in early 1985 between the U.S. and European Economic Community. Many in the industry expect that by the end of the third quarter, the tremendous gap between domestic and foreign producers should begin to narrow. But the agreement alone certainly will not be enough to eliminate it. And its real effect might not be felt until the final quarter of the year.

The surge of imports actually widened earlier in the year because of a provision in the agreement that 65 pct of the 263,000 tons of imported pipe and tube that had been embargoed would be counted toward the 1985 quota figure. Much of the embargoed product was released early in the year, industry officials say.

But imports are actually just one problem facing the industry. The worldwide overcapacity of steel and the strength of the U.S. dollar continues to hurt domestic producers.

Another problem is the uncertainty surrounding world oil prices. Some observers expect price cuts in the overseas market during the third quarter. This would further depress domestic offshore drilling.

In addition, the oil drill rig count, an important barometer, has been sliding. The figure dropped steadily from 2,452 in January to 1,865 in the beginning of June, more than 17 pct behind last year's pace.

Projections are that the rig count will continue to lag last year's pace in the third quarter. Many industry officials have scaled back more optimistic predictions made earlier this year by 10 to 15 pct.

MINING EQUIPMENT—Mining equipment manufacturers have watched one of their major markets steadily decline for the past few years. They expect the contraction in iron ore mining to continue through 1985 as the domestic steel industry reels and shrinks in the face of foreign products. "I doubt if you'll see an iron ore mine enlargement, let alone a new iron ore mine put in in the continental U.S. ever again," said one industry expert.

"This, of course, has translated into zero business in terms of stacker reclaimers, grinding machinery and other iron ore mining technologies," he added. The "final size" of the iron ore mining industry will be about 60 million tons, he predicted. Some see an even smaller industry.

Other markets for mining equipment makers are certainly not so gloomy. Coal mining has been steady in recent years and quite possibly could ride a high tech horse into a future boom. Various research projects imply an eventual solution to the pollution problem in high sulphur coal. This would open up the Appalachian coal seams again to major utility use throughout the Eastern U.S.

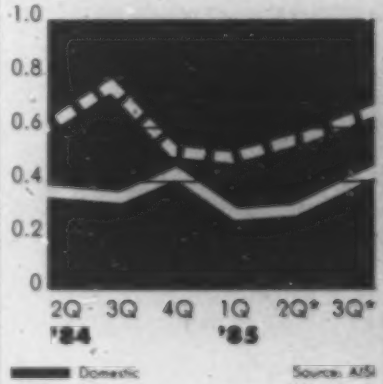
Meanwhile, Appalachian coal usage, albeit with expensive electrostatic precipitator technology, has continued and equipment makers have been reporting a business-as-almost-usual world in their industry.

Other metals mining markets are temporarily as bad as iron ore due to a slump in demand. Copper mines, here and in Africa, are as quiet as iron ore mines today. Few expect the yellow metal to make a comeback for at least a year.

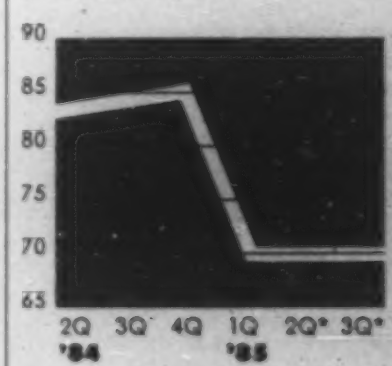
All in all, the mining equipment manufacturing business is about as depressed as it ever has been. "Even the Depression wasn't much worse," said one industry source.

The drill rig count, an important barometer (for the tubular goods industry), has been sliding.

Tubular Goods Shipments
In Millions of Net Tons



Mining Equipment Sales
In Millions of Dollars

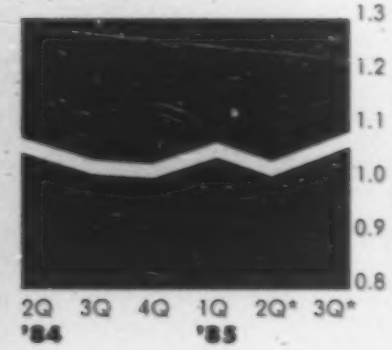


Total U.S. and export figures; includes continuous miners, mobile loading machines, shuttle cars and cutting machines.
Source: Mining equipment manufacturers
*IIA estimate

CONSTRUCTION; FARM EQUIPMENT

The (construction equipment) industry's gains have varied widely by geographic areas and by types of equipment.

Construction Equipment Shipments
In Billions of Dollars



Source: U.S. Department of Commerce
*1Q estimate

Farm Equipment Wheeled Tractor Sales
In Thousands of Units

Source: Farm & Industrial Equipment Institute
*1Q estimate

CONSTRUCTION—While the recovery in construction machinery has been reasonable on a quarter-to-quarter basis, it hasn't generated a lot of new business for industry suppliers. The gain in the first quarter of this year was pegged at about 5 pct over the fourth quarter 1984. That's an improvement, but only about half the seasonal gain usually expected for this quarter.

Some equipment builders report that second quarter sales were better. Some advanced 20 pct, about par for what is usually the strongest shipping season for the industry.

One of the brighter spots has been light machinery, helped by a sturdy housing market. It bobbed up and down but averaged out to a fairly good figure when compared with the heavy machines that draw the big sales dollars.

Overall, the industry's gains have varied widely by geographic areas and by types of equipment. Highway construction equipment has continued relatively good, but some other areas are not producing the business that had been anticipated.

Another continuing problem: imports. This hit heavy equipment hard, and items like motor graders suffered. The highway program has been good, but payments there were slower in coming out into the field than was expected.

Contractors have been tight on money, partly due to that. At any rate, they've shown more of a tendency to rent equipment or add used equipment, which also cut into the second quarter sales potential.

For the third quarter, the industry faces a normal seasonal drop that will probably pull down shipments by about 6 pct below the second quarter figure. It should be noted that some forecasters are already shaving back their 1985 full-year forecast by about one-third.

FARM EQUIPMENT—Farm machines, hit by a combination of imports and poor domestic markets, continue to struggle on the bottom rungs of the manufacturing ladder.

Many industry members expected sales to rise this year. Now, according to a recent survey by the Farm & Industrial Equipment Institute, its members felt that 1985 sales will be off 5 pct from the low totals of 1984.

Both combines and tractors, which generate the industry's big dollar volume, were hit in 1984, and are suffering even more in 1985. Through April, total farm tractor sales were down 6.7 pct, but the big four wheel tractors were off 48.3 pct in what was a recovery year for the rest of the economy.

Second quarter normally sees the strongest gain of the farm equipment year, as measured in retail sales. That seasonal impetus will probably bring up sales in second quarter, when the final results are in, to about 30,000 tractors. From there, the movement through third quarter is again downhill, with sales usually falling about 25 pct below the second quarter levels.

At the best, the third quarter this year would be at 22,250. Making the problem worse is that other lines of equipment often begin to pick up in that period, but almost all lines of farm machines, including forage tillage machines, are looking equally bleak for the rest of the year.

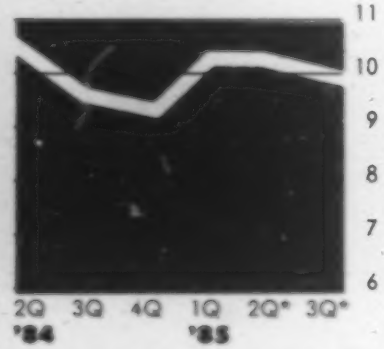
The fourth quarter usually sees a slight seasonal recovery, but not enough to save what is proving to be the worst year in the 1980. There isn't much reason for farm machine builders to raise schedules in anticipation of a fourth quarter sales gain.

Only light industrial equipment, used in the housing market and industrial markets, offers some relief, but not enough to help the heavy equipment plants for this industry.

APPLIANCES; MATERIAL HANDLING

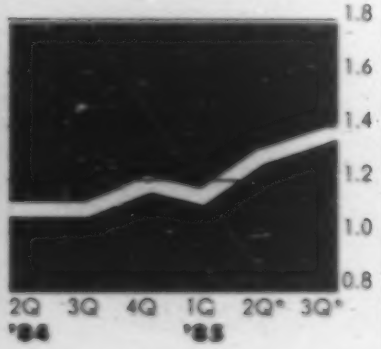
Optimism within the appliance industry is based on the knowledge that there is a strong replacement market.

Appliances, Shipments
In Millions of Units



Source: Assn. of Home Appliance Manufacturers
*IA estimate

Material Handling Shipments
In Billions of Dollars



Source: Material Handling Institute
*IA estimate

APPLIANCES—The latest year-end results indicate that total factory shipments for 1984 were 39.4 million units, setting a new annual record with shipments exceeding the previous record set in 1973 by 3.6 million units.

The record-setting pace continued into the first quarter of 1985 when another record was set: 10.2 million units were shipped by members of the Association of Home Appliance Manufacturers (AHAM). This was the largest first-quarter shipment in history. It was also 5.8 pct higher than the prior first-quarter record set in 1984.

Will the momentum continue? Apparently it will. By the end of April, the year-to-date shipment figure was 13.8 million units, up 7.4 pct over the like period of 1984. By June, AHAM revised its projection for 1985 upwards, from 39.8 million to 40.3 million units.

Much of the optimism within the appliance industry is based on the knowledge that there is a strong replacement market which should keep demand for appliances strong for some time. They see 80 million out of 400 million major appliances as being ripe for replacement. And, the demographics are favorable; 43 pct of Americans over 18 will soon be in the important 25—40 year old bracket that buys many appliances.

Exciting new products that have considerable sophistication, with microcomputers, electronic solid state controls and visual displays are appealing to buyers. Innovations in appliance configurations, such as the over and under dryer/washer, have also attracted many customers.

The home building market appears to be strengthening at this time due to lower mortgage rates and continued high levels of consumer confidence. Home modernization projects are also increasing.

MATERIAL HANDLING—Material handling companies are reporting a continuing upswing in orders as the first half ends. With few market niche exceptions, the industry is still on the rise.

"We've had some very good business so far this year and expect the rest of 1985 to be even better," said one large systems manufacturer. "In fact, this year could be one of the great ones," he added.

Major markets for AS/RS (automatic storage/retrieval systems) such as automotive, food and beverage, and aerospace have been providing high levels of business activity for the large systems companies.

"We expect no major downturns for at least the rest of 1985," said another systems industry leader. "Of course, we have not got the import problems that some others in material handling have." He is referring to one area in the domestic material handling business that is not all smiles: industrial trucks.

Lift truck companies and other special vehicle makers have been fighting what may be a losing battle with foreign suppliers for several years and a few have already joined forces with their former competitors. That trend is expected to continue leaving less and less of the domestic market for factory trucks to domestic manufacturers.

As for the rest of the year, most material handling systems industry managers are predicting steady rises in business activity and no serious downturn for quite some time, perhaps not until well into the second half of 1986.

"There's still a lot of pent up demand out there for our kind of system. Given the very low inflationary expectations of today, we're betting on a very good second half and possibly an equally good 1986," said one leading crane executive.

CASTINGS; FORGINGS

CASTINGS—Despite an unexpected strength in auto castings volume, the ferrous castings market has slipped. And the betting among foundrymen now is that the third quarter, which falls seasonally about 10 pct, will drop all of that and maybe a hair more.

The culprit is the slow gains in capital goods markets. And, for the first time since the recovery began, the demand from refrigeration markets—tied to the consumer segment of the economy—showed slippage.

Another bower of strength in 1984 has also faded back. Heavy trucks are a good tonnage market, but a number of sources report that this is looking softer and they are beginning to revise their forecasts downward a few percentage points.

Farm equipment, normally a good second quarter castings market and pretty fair even in the early summer, is still slipping. Construction machinery, though in better shape than farm machines, is through its strong buying season and can't give much market support to castings sales.

On the plus side, some producers of large castings used in heavy process machinery report a pickup in recent weeks. That market has been lagging in the recovery. Other areas, like soil pipe and pressure pipe, are doing well, and ingot molds are at least holding. Another process market, pumps and compressors, has also been a strong performer, though the recent drop in refrigeration orders should rob some of the power from this market.

In the nonferrous castings, copper and brass seems to be holding relatively better than other metals though a few foundries reported a slight softening in the second quarter. Aluminum slipped a little more widely in the second quarter and is expected to drop off again in the third and fourth quarters.

FORGINGS—Last year was a so-so year for the forging industry. Expectations were that this year would be much of the same.

However, through the first half of 1985, the industry sales have slipped badly. It will take a miracle in the second half for forgings producers to approach last year's sales totals. There is little evidence that this will take place.

Orders for impression die forgings booked through the first quarter of 1985 were down 22 pct. Preliminary figures indicate that the second quarter saw a similar decline. The weakening sales are not restricted to a few customer groups. Nearly all markets are off.

Because of a great influx of goods from overseas, due primarily to the strength of the dollar, U.S. producers are losing sales to foreign firms (even as they increasingly look overseas for capital equipment for themselves). The public, on the other hand, encouraged by lower interest rates, continues to buy goods like cars. Sales to auto industry remain the one bright spot for the forging industry. Unfortunately, some 37 pct of the forgings in the cars Americans buy come from overseas.

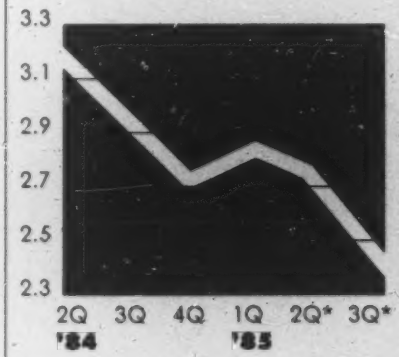
If automotive manufacturers continue to buy forgings, few others are. Forging orders for industrial machinery and engines has fallen off. Sales to manufacturers of off-highway equipment, farm machinery, oil field goods and aerospace products remain bleak.

Even defense-related orders have fallen off this year, a surprise because of the current Administration's commitment to defense.

As a result of several depressing years and an excess of forging capacity worldwide, a substantial number of forging companies are up for sale, greatly reduced in size, or out of business.

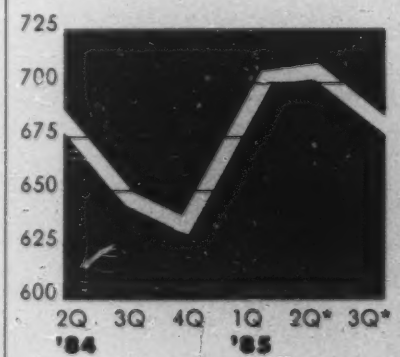
Some producers of large castings used in heavy process machinery report a pickup in recent weeks

Ferrous Castings Shipments
In Millions of Tons



Source: Forging Industry Assn.
*IA estimate

Impression Die Forgings Shipments
In Billions of Dollars



Source: U.S. Department of Commerce
*IA estimate

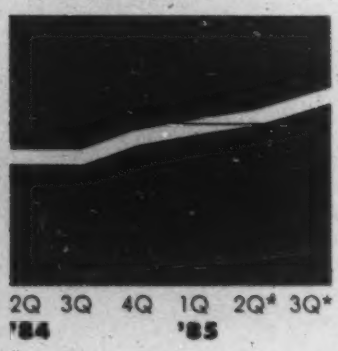
AIRCRAFT; ENGINES & TURBINES

The domestic aircraft industry still is being buffeted by intense competition for sales

Commercial Airplane Orders
No. of Planes

Source: Airbus Industrie, Boeing and McDonnell-Douglas
*IA estimate

Engines and Turbines Shipments
In Billions of Dollars



Source: U.S. Department of Commerce
*IA estimate

AIRCRAFT—The aircraft industry finally appears headed toward clear skies. Last year's economic recovery appears to have taken firm hold in the industry, resulting in improved airline passenger traffic growth and improved profitability. Both the general recovery and growing airline passenger traffic is projected to continue into the third quarter, though perhaps at a somewhat slower pace than it has so far this year.

Nevertheless, the aircraft industry is expected to greatly benefit as more airlines move to replace aging fleets with new-generation, fuel efficient airplanes. Also lending momentum to the upward trend are softer airline fuel prices and recently negotiated employee wage concessions. Another positive sign: The improvement in traffic growth has essentially absorbed the excess capacity which plagued the airlines in recent years.

It's no coincidence that many airlines responded in the second quarter by placing large orders for replacement aircraft. China, which is restructuring its entire internal airline operation, finalized orders for 26 new Douglas airplanes in April and eight Boeing aircraft in May. Air France placed an order in the second quarter for 25 new-generation Airbus A-320 airplanes.

The trend toward large replacement orders should continue in the third quarter. At least two foreign airline carriers and an international leasing agency are set to finalize substantial new orders.

The domestic aircraft industry still is being buffeted by intense competition for sales, especially from foreign manufacturers like the Airbus European consortium.

Discounts and special leasing arrangements should continue for the short term. But the overall trend is decidedly upbeat.

ENGINES & TURBINES—The gradual improvement evident for several quarters in this wide-ranging industry is expected to continue into the third quarter of 1985. The long-standing economic recovery has positively impacted several important segments of the engines and turbines industry. But recovery in other segments, especially in the utilities area, has been dragging. This trend also is expected to continue through the end of the year.

To be sure, this industry has greatly recovered from the precipitous drop in orders that occurred in 1983. The automotive sector has strongly rebounded. Lower interest rates should continue to aid this area in the third quarter. The drop in interest also has boosted the construction segment. Both of these areas should perform well through the end of the year.

Uncertainty surrounding newly introduced federal tax proposals and their impact on the construction trade could bring difficulties, however. The growing federal deficit also could cause interest rates to begin climbing in a few months, spelling renewed difficulties for the automotive and construction areas.

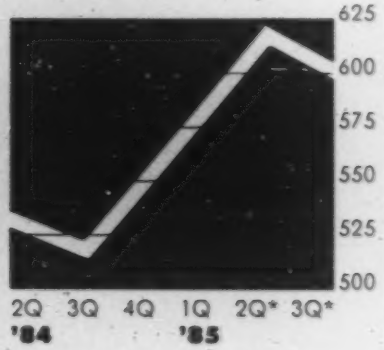
The continued overcapacity in the consumer electrical power market has continued to cast a pallor over the entire industry. The long-term softening in world oil prices has caused the oil segment to remain sluggish. Expensive purchases of items like large diesels and power plants have been forestalled for several quarters. These trends show no sign of reversing until well into next year, and then only if the economic recovery sustains itself.

The industry has slowly been gaining steam, especially in the consumer area. But there has been no large increase in consumer or industry demands for electrical power.

WELDING; HEAT TREATMENT

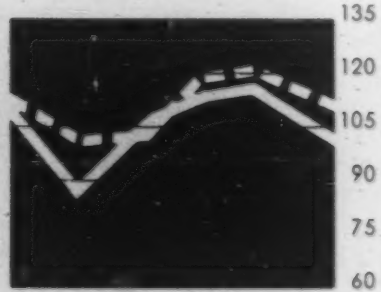
Business at the (welding) distributor level is at an all-time high

Welding Shipments



Index: 100 = $200 million in distributor sales
Source: National Welding Supply Assn.
*IA estimate

Heat Treatment
In Millions of Dollars



Sales of Commercial Heat Treaters
Heat Processing Equipment Orders
Source: Industrial Heating Equipment Assn., Metal Treating Institute
*IA estimate

WELDING—Some analysts are saying that the welding industry has never had it so good. Others claim that there's really nothing much to write home about. The truth, it seems, lies somewhere in between.

Cause for the optimism is based on activity of thousands of small fabricators, most of which are served by welding distributors. According to the National Welding Supply Association (NWSA), Philadelphia, business at the distributor level is at an all-time high. April was the best month since the NWSA began compiling statistics in 1981.

The story is quite different over on the other side where the welding manufacturers are dealing directly with the large users of welding equipment and consumables. As an executive of one leading welding equipment manufacturer put it: "Business is fairly flat among the bigger industries."

Mechanized welding has passed and is beginning to pull away from the stick electrode in sales volume. This trend is noticeable among both the large and small-sized customers. Both welding manufacturers and distributors are enjoying increasing sales in Tig welding equipment, and the distributors in particular are seeing tremendous growth in equipment in general.

The NWSA cites a 19 pct growth in equipment sales from February to March. Then, from March to April there is another 12 pct jump in equipment sales.

Before the figures were in for the first quarter of 1985, the best quarter in NWSA record-keeping history was the fourth quarter of 1984.

The second quarter of 1985, once the numbers are compiled, should show a 7 pct improvement over the record-breaking first quarter, but there will be a slight seasonal dip in the third quarter.

HEAT TREATMENT—Heat treaters continued their strong performance in the opening months of 1985. For the third quarter, however, seasonal factors should bring heat treater activity off about 10 pct from the strong levels of first half.

Heat treating, as an industry, tends to lag behind many other manufacturing industries in an upturn. But it also enjoys a long run when other industries begin to slow.

Outsiders will perhaps question reports that first quarter activity for heat treaters was up 14 pct over the preceding quarter.

And for some with a lot of farm and construction machinery accounts, that would seem pretty high. But some heat treating shops reportedly were running more than 20 pct ahead of the close of 1984 by the middle of the first quarter of 1985.

Surprisingly, some reports indicate that a few that did slough off a bit in the first quarter, but came back again in the second quarter. The overall figures for industry sales in the second quarter are likely to run almost flat with the first quarter totals, or at best up just a few percentage points.

Auto is still carrying the big market load, but there seems to be increasing interest in aerospace and defense markets, even though some say the area hasn't come along as fast as they'd hoped.

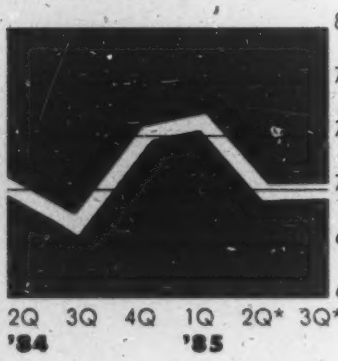
The good performance of the heat treaters carries over into the industrial heating equipment market as well. Like total heat treating orders, equipment orders tend to peak late in a recovery, as happened in 1981, and the current reports on dollar volume show the best numbers since that period.

There's also some feeling that, even with some dropoff in third quarter in order rates, the year could finish at a strong level.

FASTENERS; GEARS

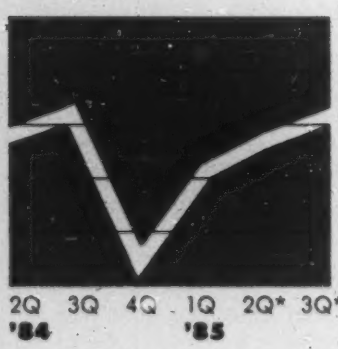
The continuing good order level from auto companies is keeping many fastener companies busy.

Fasteners, Sales
In Millions of Dollars



Source: Industrial Fasteners Institute
*IA estimate

Gears Bookings



Based on average monthly bookings, 1977 = 100
Source: American Gear Manufacturers Assn.
*IA estimate

FASTENERS—Fastener makers expect the second half of 1985 to be down by perhaps 5 to 10 pct in total sales volume from the first half. Still, the continuing good order level from auto companies is keeping many fastener companies busy.

Meanwhile, the share of the market captured by offshore companies has reached record levels in standards and is expected to continue growing. "I wouldn't be surprised if you'll be unable to find a domestic producer of standard nuts and bolts by the end of the decade," predicted an industry expert.

Others in the industry point out that there has been some recent discussion in the market about quality problems with foreign suppliers. "The issue of price is no longer the only issue even with standards," said an industry member. "We're hearing from some customers about quality control as well."

Specials producers, on the other hand, are so far enjoying relatively import-free business. "The first half for us was very good and we expect only a moderate decline in the second half," said one specials company president. "It's difficult to import truly engineered fasteners. The quality issue is supreme."

Further optimism for specials makers as well as those still in the domestic standards end of the business comes from the continuing military buildup. "There's already enough business in that pipeline to carry a company like ours for two years," said one specials maker.

Others say that the "shakeout" in the industry isn't over yet and that a few more domestic companies are destined to leave the business before the end of 1985. "Our industry's legitimate market size is perhaps 65 pct of what it was six or seven years ago. I don't think we're there yet," said one industry source.

GEARS—While the general economy may be hanging its head a little now, some gear industry officials sound a bit more optimistic.

One industry observer believes third quarter sales could be up by 10 pct, and that the gain could carry over into the fourth quarter.

But a Midwestern gear executive, admittedly conservative, feels this should be more like 5 pct and noted that the current operating rate in the industry is running around 65 pct.

Meanwhile, figures from the American Gear Manufacturers Assn. indicated that both bookings and shipments dipped a bit in April.

Still, if the market is going into a higher gear, so to speak, one gear industry official suggests that both the military and the consumer are providing the push. Demand in the industry traditional capital goods markets—oil, mining, farm equipment and chemical—is flat.

But industry members report automobile companies are spending and are expected to do so through year-end. Sales to the appliance makers is also reported to be active.

Sales to the aerospace industry and ordnance manufacturers remain strong, thanks largely to the Reagan Administration's defense budget.

Moreover, service parts business is stronger than gearmakers had anticipated earlier, but gear sales to construction equipment manufacturers are expected to remain "soft."

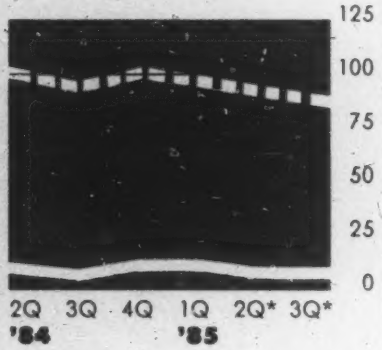
Of course, talk with many gearmakers and *exports* emerge as their continuing, Excedrin headache. The strong dollar keeps many in the domestic industry from competing with the foreign gearmakers.

The American industry's export situation was painfully bought home to one gear official after his recent trip to West Germany, which is enjoying a strong export market in both South America and India.

SHIPBUILDING; RAILCARS

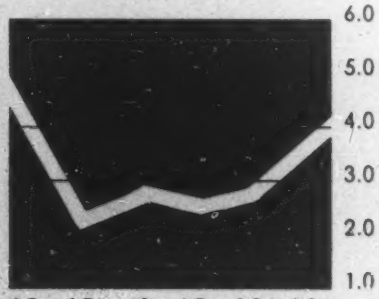
Naval shipbuilding is still moving full steam ahead

Shipbuilding
No. of vessels



Source: Shipbuilders Council of America
*IA estimate

Rail Car Orders
In Thousands of Units



Source: American Railway Car Institute
*IA estimate

SHIPBUILDING—Naval shipbuilding is still moving full steam ahead; this is important because 80 pct of all domestic shipbuilding is for the U.S. Navy.

The number of Navy vessels under construction, of 1,000 light displacement tons and over, peaked at 100 in the fourth quarter of 1984. The figure dropped to 96 in the first quarter and will drop further to 90 and 86 vessels, respectively, in the second and third quarters.

That can be deceiving, though, because overall Navy appropriations are increasing. Work started on a $1.2 billion DDG-51 guided missile destroyer during the second quarter. Work is also expected to start up in the third quarter on a $1.7 billion Trident ballistic missile submarine.

As far as the number of ships under construction are concerned, 11 Navy vessels were completed during the second quarter of 1985, but fabrication began on five new ones. Twelve more Navy ships will be completed during the third quarter, while work will start on eight new vessels, including one TAO oiler. Work began on two other oilers in the second quarter.

The number of commercial ships under construction (1,000 gross tons or over) held at 10 vessels during the fourth quarter of 1984 and the first quarter of this year, then dropped to seven vessels where it is expected to remain into the third quarter.

Drill rig construction, which is only a shadow of its former self, is showing signs of coming back to life. According to the U.S. Department of Commerce, drill rig construction peaked at 81 units in 1981, then dropped down to three in the fourth quarter of 1984. Drill rig construction is now up to four units and there's hope for more before the year is out.

RAIL CARS—Off to a slow start, it would appear that 1985 will be no banner year for the rail car industry. Yet, the U.S. Dept. of Commerce did predict a better year than 1984, so business is bound to improve, but maybe not until the third quarter. It seems that rail car production has some catching up to do.

The first quarter exhibited a slight drop from fourth quarter 1984 production. In the fourth quarter, orders were taken for 2,854 rail cars, then dropped to 2,606 in the first quarter of this year. We are looking for orders in the second quarter to bounce back to the level of the fourth quarter, then enjoy a spurt in the third quarter.

In its *U.S. Industrial Outlook*, the Commerce Department was predicting that orders would double this year over 1984. If that prediction is on target, rail car orders would still only be about one-half what they were in their peak years.

Here's a rundown of first quarter statistics as of April 1, according to the Association of American Railroads, Washington. This year's new cars ordered (2,606) was well under the 5,472 ordered in the first quarter a year ago. Car deliveries were 2,585 this year, compared to 1,837 during the first quarter of 1984.

The figures for new cars on order and undelivered are as follows: 4,169 this year, compared to 6,375 in the same period, 1984.

Freight traffic on major U.S. railroads during the week ended May 18 totaled 17.6 billion ton-miles, 2.0 pct below the corresponding week of 1984. Carloadings totaled 389,296. Loadings of motor vehicles and equipment were up 9.2 pct over the same period last year.

Cumulative volume for the first 20 weeks of 1985 was an estimated 342.4 billion ton-miles, down 3.6 pct from last year's period. □

1st QUARTER EARNINGS

STEEL IN THE RED; NONFERROUS OFF

BY GEORGE J. MCMANUS AND ROBERT REGAN

Price weakness played havoc with the balance sheets of both the steel and nonferrous metals producers in the first quarter. Shipments rose, but earnings slid for many of the major producers.

STEEL

The steel industry's war of attrition produced another casualty in the first quarter.

Wheeling-Pittsburgh Steel Corp. went bankrupt. Contributing to Wheeling-Pittsburgh's failure were operating losses of more than $11 million in the first quarter and nearly $37 million in the fourth quarter of 1984.

In the race for survival, United States Steel Corp. was among the leaders. U.S. Steel was the only one of the five largest mills to report a net profit in the first quarter.

Not surprisingly, sales and earnings of most steel companies were down from the first quarter of 1984. Steel shipments fell from 19.4 million tons in the first quarter of 1984 to 17.9 million tons in this year's first quarter.

However, steel shipments were up by nearly 2 million tons from the fourth quarter of 1984. It might have been expected that the added volume would bring significant profits gains. That didn't happen and the problem continued to be prices that were below costs.

Inland Steel Co. said there was little or no change in its price realization in the first quarter. Others said price cutting had intensified and there was a further weakening in the second quarter.

A quick check of market shares provided little guidance on the sources of price weakness. U.S. Steel's share of total industry shipments was down slightly from the first quarter of 1984. Armco Inc. increased its share. There was no way of knowing if the numbers reflected different product mixes or actual market shifts.

For U.S. Steel, the earnings of Marathon Oil provided a cushion against the ravages of the steel business. The oil dollars helped, but not as much as might be imagined. Marathon's operating profit of $293 million was down from $363 million in the first quarter of 1984 and was partially offset by the debt incurred when the oil company was acquired.

Not insignificant was U.S. Steel's first quarter operating profit of $34 million on 2.9 million tons of steel shipped. That came to $12 a ton and was up from a steel operating profit of $4 million in the first quarter of 1984. "These operating results reflect the cost cutting measures we've taken to reduce our break-even level," said David M. Roderick, chairman of U.S. Steel.

Weirton Steel Corp. continued to provide a testimonial to the benefits of employee ownership. Weirton had a net profit of $10.2 million in the first quarter.

With steel conditions going from bad to worse, the company was profitable in the first five quarters of its independent existence. "Compared to last year's first quarter, profit improved by 5.3 pct, sales by 4.4 pct, and shipments by 3.4 pct," said Robert L. Loughhead, president of Weirton.

Inland Steel had an operating profit on steel of nearly $6.5 million in the first quarter, but a net loss of $6.3 million. Although this was a relatively good showing, Inland was proceeding with a drastic cost cutting and restructuring program. Plans called for reducing salaried employment by 20 pct and cutting steelmaking capacity. Until recently, Inland's strategy was based on a full commitment to steel and to growth for the company in steel.

Interlake had a net profit of $7 million in the first quarter, but none of this came from basic steel. "Primary metals segment results have been breakeven so far this year," said Frederick C. Langenberg, chairman of Interlake.

Losses continued at alarming rates for LTV Corp., Bethlehem Steel Corp. and Armco. The $156 million loss of LTV Corp. was due in part to costs associated from the merger of Jones & Laughlin and Republic Steel. The company also cited "extremely unfavorable market conditions in the steel business."

Finally, the merger had the effect of adding Republic's debt and increasing LTV's interest charges from $44 million in the first quarter of 1984 to $70 million in the 1985 first quarter.

Bethlehem's net loss of $62 million in the first quarter reflected the company's almost complete dependence on the steel business. Bethlehem made a major diversification move in March, when it acquired J.M. Tull Industries, Inc., a distributor of metals in the South.

Like LTV, Armco has been laboring under a heavy debt burden. To lighten the load, Armco is selling its aerospace and strategic materials

STEEL: ANOTHER SHOT OF RED INK

FIRST QUARTER PROFIT REPORT—1985 (In Millions of Dollars)

		EARNINGS			SALES		
	1985 E/S	1st Q 1985	1st Q 1984	Pct Change	1st Q 1985	1st Q 1984	Pct Change
USS	1.3	$58.0	$171.0	-66.4	$4,523.0	$4,836.0	-6.5
LTV	—	(156.4)	(29.0)	—	1,995.1	1,407.0	+41.8
BETHLEHEM	—	(62.1)	(54.6)	—	1,214.0	1,334.0	-9.1
ARMCO	—	(22.5)	56.3	—	919.5	967.8	-5.0
INLAND	—	(6.3)	2.0	—	818.7	850.3	-3.8
NATIONAL	—	(39.8)	(6.1)	—	514.0	576.4	-10.9
TOTAL	—	(229.1)	139.6	—	9,984.2	9,972.4	+0.2
CYCLOPS	1.0	3.1	2.3	+34.8	320.5	291.6	+10.0
WEIRTON	3.5	10.2	9.7	+5.2	295.6	283.1	+4.3
WHEEL-PGH.	—	(25.8)	(4.9)	—	241.0	258.9	-7.0
INTERLAKE	3.3	7.0	6.9	+1.5	212.4	212.5	-0.1
NUCOR	9.4	10.2	5.3	+92.5	169.0	152.0	+11.2
CARPENTER	6.9	10.3	11.4	-9.7	147.8	146.4	+1.0
LUKENS	—	(0.4)	(2.5)	—	100.5	91.1	+10.4
COPPERWELD	—	(0.6)	2.8	—	98.9	118.4	-16.5
CF&I	—	(0.4)	(3.0)	—	71.0	73.0	-2.6
QUANEX	2.5	1.8	1.3	+38.5	70.0	94.7	-26.1
FLORIDA	2.1	1.4	3.7	-62.2	69.1	71.6	-3.5
LACLEDE	2.5	1.5	1.9	-21.1	59.1	58.5	+1.1
EASTMET	—	(6.5)	1.6	—	56.2	70.3	-20.1
PHOENIX	—	(1.7)	(3.9)	—	27.0	32.8	-17.7

NONFERROUS: A LUSTERLESS QUARTER

FIRST QUARTER PROFIT REPORT—1985 (In Millions of Dollars)

	EARNINGS			SALES AND OTHER REVENUES		
	1st Q 1985	1st Q 1984	Pct Change	1st Q 1985	1st Q 1984	Pct Change
ALCAN	$30.0	$83.0	-63.9	$1,408.0	$1,431.0	-1.6
ALCOA	6.7	97.8	-93.1	1,313.9	1,483.0	-11.4
ALUMAX	10.1	37.5	-73.1	450.0	505.0	-10.9
AMAX	(35.3)	8.2	—	547.4	646.0	-15.3
ASARCO	(19.1)	(31.1)	—	260.7	398.6	-34.6
BRUSH WELLMAN	9.8	10.1	-3.0	77.6	80.6	-3.7
CABOT	17.9	25.2	-29.0	547.6	467.9	+17.0
COMINCO	(0.6)	4.5	—	337.6	371.1	-9.0
ECHO BAY MINES	3.0	5.1	-41.2	25.0	20.4	+22.5
ENGELHARD	11.7	(15.7)	—	575.2	642.7	-10.5
FALCONBRIDGE COPPER	(0.5)	0.9	—	26.4	23.7	+11.4
FALCONBRIDGE LTD.	12.2	7.9	+54.4	216.3	168.2	+28.6
FREEPORT MCMORAN	25.7	22.1	+16.3	214.6	202.7	+5.9
HOMESTAKE MINING	3.3	11.3	-70.8	73.4	82.2	-10.7
INCO	12.1	(35.1)	—	384.0	371.0	+3.5
KAISER ALUMINUM	(18.5)	14.6	—	851.6	723.8	+17.7
NEWMONT MINING	3.1	11.8	-73.7	170.6	162.8	+4.8
NORANDA	(9.9)	31.0	—	874.8	874.7	—
OLIN	15.6	27.2	-42.6	540.3	526.5	+2.6
OREMET	1.2	0.3	+300.0	15.0	8.9	+68.5
PHELPS DODGE	1.6	(5.0)	—	223.6	250.5	-10.7
REVERE COPPER	17.6	13.6	+29.4	122.8	158.8	-22.7
REYNOLDS METALS	7.0	22.3	-68.6	811.4	944.9	-14.1
SHERRITT GORDON	1.8	(2.7)	—	116.6	92.1	+26.6
VULCAN MATERIALS	5.0	6.7	-25.4	203.5	202.4	+0.5

Aluminum Co of America: Net income for the 1984 period includes gains of $8.7 million from joint venture agreements and $5.3 million from a real estate transaction. **Amax Inc.:** Net income for the 1984 period includes $7.7 million tax benefit from tax-loss carryforward. **Cominco Ltd.:** Canadian funds. Net loss for the 1985 period is after a $9.4 million gain from the sale of a subsidiary. **Echo Bay Mines, Ltd.:** Canadian funds. **Falconbridge Copper Corp.:** Canadian funds. **Falconbridge Ltd.:** Canadian funds. Results for 1984 period are restated. **Freeport McMoran Inc.:** Net income for the 1985 period includes a $1.034 million gain on sale of a division. **Kaiser Aluminum & Chemical Corp.:** Net income for the 1985 period includes a $430,000 tax benefit from a tax loss carryforward. Losses from discontinued operations were $701,000 in the 1985 period and $1.649 million in the 1984 period. **Phelps Dodge Corp.:** Net loss for the 1984 period is after $25 million net income from discontinued operations. **Revere Copper & Brass:** Tax benefits from the tax loss carryforwards amounted to $4.278 million in the 1985 period and $4.385 million in the 1984 period. Net income for the 1985 period includes a $12.839 million gain on the sale of a sheet mill and related assets and a $6.365 million loss related to mill restructuring. **Reynolds Metals Co.:** Net income for the 1985 period includes a net gain of $2.5 million from settlement of litigation. **Sherritt Gordon Mines Ltd.:** Canadian funds.

properties. As fast as it can, the company is terminating some disastrous financial services ventures.

"We have sold our major finance leasing companies, which will enable us to eliminate approximately $535 million of our financial service business debt," said Robert E. Boni, Armco chairman.

By and large, the non-integrated electric furnace mills fared better that the blast furnace companies in the second quarter. There were, however, wide variations. Among the specialty companies, Eastmet Corp. lost $6.5 million, Cyclops earned $3.1 million, and Carpenter Technology Corp. earned $6.9 million.

Carpenter achieved a 6.9 pct return on sales; Nucor Corp. earned 9.4 pct. Florida Steel continued in the black, but its earnings were down from the first quarter of 1984.

Laclede Steel Co. also remained profitable. Laclede and Bechtel have joined in a study aimed at straightening out ISCOTT, Trinidad's ailing steel company.

With regard to the rest of 1985, no surge in volume has been indicated. Most forecasts now call for shipments of 19 million to 19.5 million tons in the second quarter. Steel producers were hoping a decline in steel imports would prevent a second half slide.

"The President's import restraint program must be put fully in place, and must be enforced vigorously in the months ahead to reduce foreign penetration to the targeted levels for 1985." said Frank W. Luerssen, chairman of Inland Steel.

NONFERROUS

One inescapable conclusion from examination of the first quarter showing of leading North American nonferrous metals companies is that metals prices weren't high enough to enable them to boost earnings over the initial period of business recovery year 1984.

A notable exception was the nickel business. Inco, Falconbridge and Sherritt Gordon Mines managed significant gains over their showing last year.

Inco credited "somewhat higher" nickel prices combined with lower unit costs. Sales volume of Falconbridge and Sherritt Gordon were up 28.6 pct and 26.6, respectively, while Inco's sales were up a smaller 3.5 pct. London Metal Exchange prices for nickel rose steadily in the first quarter and have continued upward since the start of the second quarter.

The London Metal Exchange price for aluminum remained lodged in a narrow range centering on a low 50¢ a lb during the first quarter and wasn't showing much strength well into the current period. First quarter results of the four leading North American producers were substantially below the same 1984 period and, where increased shipments were reported, the indications were that most of the demand centered on low profit items like ingot and extrusion billet.

Aluminum industry bookings through the first third of this year have been about on par with the same 1984 period, but ingot and billet have been getting most of the play. Import pressures have been retarding prices in the mill product sector.

Producers' inventories have been slow to reflect the production cuts made since late last year, mainly in the U.S. This has had a dampening effect on the price structure for ingot that carries over into the mill product sector as well. Meanwhile, traditional ingot shippers have begun moving up into the lower end of the mill product mix.

Average prices for copper were down in the first quarter from the same 1984 period, but managed to edge upward early in the second quarter. Phelps Dodge managed to squeak out a small $1.6 million profit, compared with a $30 million loss (from continuing operations) in the same 1984 period despite the lower copper price. The improvement was attributed to lower unit costs and mining in an unusually high ore grade at the Morenci, Ariz., mine as well as the start-up of a low cost solvent extraction-electrowinning operations at Tyrone, N.M.

Asarco credited a narrowing of its first quarter loss to reduced costs and increased foreign currency translation adjustments. The company noted that average producer copper prices edged higher in the first quarter from the latter part of 1984 and that the gain continued into the current period, suggesting that "copper prices are at last responding to the good demand—substantially in excess of supply—which has prevailed since early 1984."

Ralph L. Hennebach, chairman, noted that Asarco's overall margin on sales of products and services doubled to 9.5 pct in the first quarter despite lower metal prices, sales and processing fees at the company's copper smelters. He also noted that the company's Amarillo refinery would be producing at capacity-plus during the second quarter. This was attributable, he explained, to electric efficiency achieved by the company's Reatrol Process for controlling addition agents in electrolytic refining solutions.

Asarco also noted that copper's slow response to positive factors reflects production policies in Chile, Zambia and Zaire, where output remains at maximum levels and is generating excessive inventories. "Sizeable curtailments of production were forced upon private sector producers in the U.S. and to a lesser extent in Canada," Asarco said. Canada was the number one supplier of imported copper to U.S. consumers in 1984.

Amax cited "continued stagnant or declining dollar prices for most metals" for its $35.3 million net loss. The company noted that the high reached by the dollar during March saw metal prices recover to record or near-record levels in foreign currencies while remaining depressed in dollar terms.

Reduced aluminum earnings by the company's 50 pct-owned Alumax, Inc., subsidiary reflected lower primary ingot prices. Alumax earnings fell to $10.1 million from $37.5 million in the first quarter last year and Amax's pre-tax equity in the aluminum unit's earnings fell to $7 million from $28.4 million. □

PRICE & PRODUCTION DATA

(Effective June 10,1985)

Steel production by districts, thousands of tons (000 omitted)

	Last Week	Two Weeks Ago	Month Ago	Year Ago
Northeast Coast	182	181	181	245
Pittsburgh	218	218	199	259
Youngstown	71	81	108	121
Lake Erie	158	136	148	159
Detroit	160	159	153	162
Chicago	469	492	505	503
Cincinnati	94	94	86	109
St. Louis	83	66	57	86
Southern	228	225	236	218
Western	96	97	94	91
U.S. Production	1,759	1,749	1,767	1,953

Source: American Iron & Steel Institute

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports. Rail transportation, handling and unloading may be charged to the account of the buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural ..... gross-ton 80.50-86.9*
Mesabi, regular-unscreened ..... gross-ton $32.53
Mesabi; non-bessemer ..... gross-ton $30.03-31.53**

*80.50¢—Pickands Mather as of 1/27/81.
86.9¢—U.S. Steel as of 3/15/82. Cleveland-Cliffs as of 2/26/82. Oglebay Norton as of 3/25/82, and Hanna Mining as of 2/26/82.
**Effective 8/1/83.

STEEL PRODUCTION, COMPOSITE PRICES

(Effective June 10,1985)

U.S. Steel Production	Last Week	Two Weeks Ago	To Date 1985	To Date 1984
Net tons, in thousands	1,759	1,749	39,898	45,337
Capability Utilization Rate	68.6	68.2	68.1	76.6

Composite Prices	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 7/1/84)	27.582	27.582	27.582	27.405
Pig Iron** (Net ton = 2000 lbs.)	$213.00	$213.00	$213.00	$213.00
Scrap No. 1 hvy.*** (Gross ton = 2240 lbs.)	$ 66.17	$ 66.83	$ 70.17	$ 85.17
No. 2 bundles	$ 47.17	$ 47.17	$ 49.17	$ 56.83

Scrap Comparison (Gross Ton)

No. 1 steel, Pittsburgh	$ 70.50	$ 70.50	$ 72.50	$ 94.50
No. 1 steel, Philadelphia	66.50	68.50	69.50	80.50
No. 1 steel, Chicago	61.50	61.50	68.50	80.50
No. 1 bundles, Detroit	59.50	59.50	64.50	87.50
Low Phos., Youngstown	57.50	57.50	57.50	89.50
No. 1 mach'y cast., Pgh	71.50	71.50	71.50	79.50
No. 1 mach'y cast., Phila	91.50	91.50	91.50	98.50
No. 1 mach'y cast., Chi	99.50	104.50	108.50	117.50

*Finished Steel Composite. Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.
**Pig Iron Composite. Based on average prices for basic and foundry pig iron at representative producing points within the U.S.
***Steel Scrap Composite. Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

NONFERROUS PRICES

(Effective June 10,1985) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum (LME)	48.22	48.72	6/10/85
Copper (C)	66.00-68.00	67.00-68.00	6/ 7/85
Lead	19.00-20.00	20.00-21.00	6/ 3/85
Magnesium Ingot	148.00	143.00	5/25/84
Nickel (LME)	252.18	253.75	6/10/85
Titanium Sponge	555.00-585.00	555.00	4/29/82
Zinc	46.00-47.00	45.00-47.00	5/ 1/85

ALUMINUM: Avg. for last week & previous week. COPPER (C) = cathode. LEAD: common grade. MAGNESIUM: 99.8% pig, delivered. NICKEL: Avg. for last week & previous week. ZINC: high grade.

Antimony, American Laredo, Texas	$2.00
Beryllium-aluminum 5% Be, per lb. contained Be	$230.00
Beryllium-copper, per lb. cont. Be	$144.00
Beryllium 97% powder 200	$178.00
Cadmium, ton lots	$1.25-1.55
Calcium, ton lots, crown	$3.76
Chromium, 99.8%	$3.75
Cobalt, 99%, cathode	$12.50
Gold per troy oz.	$312.00
Indium, dollars per troy oz.	$2.50
Iridium, dollars per troy oz.	$440.00
Magnesium sticks, 10,000 lbs.	$2.02
Mercury, per 76-lb. f.o.b. N.Y.	$303.00-313.00
Molybdenum, lb. tech. moly oxides, 20 lb. MO can	$6.85
Nickel electro (PDCR)	$3.29
Palladium, per troy oz.	$98.00
Platinum, per troy oz.	$263.50
Rhodium, per troy oz.	$800.00
Silver ingots, per troy oz.	$6.085
Vanadium	$6.00
Zirconium sponge	$12.00-17.00

(Per lb. unless otherwise noted)

Straits Tin Price

(U.S. cents per lb. EX-SMELTER, based on daily market in Penang in Malaysian dollars per kilo.)

June 3—540.76 June 6—539.07
June 4—539.12 June 7—540.07
June 5—Holiday

Scrap Prices
Brass Mill Scrap

(Cents per lb; over 20,000 lbs. add 1¢ per lb)

	Solids	Turnings
Copper	63	47
Yellow brass	56¾	49¾
Red brass	59½	50¼
Comm. bronze	60¾	50½
Mang. bronze	48¾	47¾
Free cutting rod ends	49	50

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	54
No. 2 copper wire	46
Light copper	37

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	50
No. 2 copper wire	42
Light copper	33
No. 1 composition	48
No. 1 comp. turnings	47
Hvy. yellow brass solids	33
Hvy. yellow brass turnings	31
Radiators	39

Aluminum

New mixed clips	32	— 33
Old sheet	29	— 31
Old cast	29	— 31
Clean dry borings	30	— 31

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum

Segregated clippings	26	— 27
Mixed L.C. clips	23	— 25
Old sheets and cast	20	— 22
Borings and turnings	17	— 19
Duraluminum clippings	24	— 25

Copper and Brass

No. 1 copper wire	45	— 46
No. 2 copper wire	37	— 38
Light copper	32	— 33
Radiators	30	— 31
No. 1 composition	39	— 40
No. 1 composition turnings	36	— 37
Cocks and faucets	28	— 29
Clean heavy yellow brass	27	— 28
Brass Pipe	28	— 29
New soft brass clippings	39	— 40

Lead

Heavy soft lead	6	— 8
Whole batteries	1	— 3
Type metal	16	— 17
Electrotype	13	— 15

Nickel

Nickel solids	120	—130
Nickel rod ends	120	—130
Nickel sheets, clips	120	—130
Nickel turnings	35	— 45

Zinc

New zinc clippings	17	— 18
Old diecast zinc	13	— 14

EFFECTIVE JUNE 10, 1985

Effective June 10, 1985. Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated. Prices are the opinions of Iron Age editors and correspondents, based on contacts with dealers, brokers, generators and users in the industry, on the effective date noted above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	$ 70.00 to	$ 71.00
No. 2 hvy. melting	60.00 to	61.00
No. 1 dealer bundles	79.00 to	80.00
No. 1 factory bundles (new)	76.00 to	77.00
No. 2 bundles	50.00 to	51.00
No. 1 busheling	77.00 to	78.00
Machine shop turnings	7.00 to	8.00
Shoveling turnings	40.00 to	41.00
Cast iron borings	38.00 to	39.00
Low phos. punchings plate	84.00 to	85.00
Heavy turnings	60.00 to	61.00
No. 2 ** hvy. melting	78.00 to	79.00
Rails, 2 ft. and under	95.00 to	96.00
Scrap rails, random lgth.	82.00 to	83.00
** specialties	88.00 to	89.00
No. 1 machinery cast	71.00 to	72.00
Cupola cast	64.00 to	65.00
Heavy breakable cast	50.00 to	51.00
Stainless		
18-8 bundles and solids	625.00 to	635.00
18-8 turnings	525.00 to	535.00

Chicago

No. 1 hvy. melting	$ 61.00 to	$ 62.00
No. 2 hvy. melting	57.00 to	58.00
No. 1 dealer bundles	73.00 to	74.00
No. 1 factory bundles (new)	77.00 to	78.00
No. 2 dealer bundles	49.00 to	50.00
No. 1 busheling	72.00 to	73.00
St. ladle scrap	10.00 to	11.00
Machine shop turnings	33.00 to	34.00
Mixed borings and turnings	34.00 to	35.00
Shoveling turnings	35.00 to	36.00
Cast iron borings	39.00 to	40.00
Low phos. forge crops	94.00 to	95.00
Low phos. punchings plate		
1 ft. and thicker	109.00 to	110.00
Low phos. 2 ft. and under	102.00 to	103.00
No. 1 ** hvy. melting	64.00 to	65.00
Scrap rails, random lgth.	69.00 to	70.00
Reroller rails	90.00 to	91.00
Rails, 2 ft. and under	95.00 to	96.00
** couplers and knuckles	84.00 to	85.00
** car axles	101.00 to	102.00
No. 1 machinery cast	99.00 to	100.00
Cupola cast	87.00 to	88.00
Stove plate	87.00 to	88.00
Steel car wheels	86.00 to	87.00
Stainless		
18-8 bundles and solids	535.00 to	545.00
18-8 turnings	455.00 to	465.00
430 bundles and solids	131.00 to	132.00
430 turnings	97.00 to	102.00

Philadelphia

No. 1 hvy. melting	$ 55.00 to	$ 56.00
No. 2 hvy. melting	50.00 to	51.00
No. 1 dealer bundles	75.00 to	78.00
No. 2 dealer bundles	40.00 to	43.00
No. 1 busheling	74.00 to	77.00
Shredder scrap	50.00 to	53.00
Machine shop turnings	25.00 to	28.00
Mixed borings and turnings	25.00 to	28.00
Shoveling turnings	37.00 to	40.00
Low phos. 5 ft. and under	76.00 to	79.00
Low phos. 2 ft. punchings	95.00 to	98.00
Electric furnace bundles	80.00 to	83.00
** specialties	87.00 to	90.00
Rails, 2 ft. and under	97.00 to	100.00
Cupola cast	75.00 to	78.00
Heavy breakable cast	53.00 to	56.00
No. 1 machinery cast	42.00 to	45.00

Detroit

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	$ 48.50 to	$ 49.00
No. 2 hvy. melting	47.00 to	48.00
No. 1 dealer bundles	59.00 to	60.00
No. 2 bundles	28.00 to	29.00
No. 1 busheling	58.00 to	59.00
Drop forge flashings	38.00 to	39.00
Machine shop turnings	38.00 to	39.00
Mixed borings and turnings	16.00 to	17.00
Shoveling turnings	39.00 to	40.00
Cast iron borings	23.00 to	24.00
Heavy breakable cast	33.00 to	34.00
Mixed yards cast	48.00 to	49.00
Automotive cast	72.00 to	73.00
Stainless		
18-8 bundles and solids	520.00 to	530.00
18-8 turnings	415.00 to	425.00
430 bundles and solids	115.00 to	125.00

Youngstown

No. 1 hvy. melting	$ 50.00 to	$ 53.00
No. 2 hvy. melting	39.00 to	42.00
No. 1 dealer bundles	57.00 to	60.00
No. 2 dealer bundles	29.00 to	32.00
Machine shop turnings	8.00 to	11.00
Shoveling turnings	13.00 to	16.00
Low phos. plate	56.00 to	59.00
Electric furnace bundles	53.00 to	56.00
Galvanized bundles	46.00 to	49.00

Cleveland

No. 1 hvy. melting	$ 50.00 to	$ 53.00
No. 2 hvy. melting	30.00 to	33.00
No. 1 dealer bundles	55.00 to	58.00
No. 1 factory bundles	55.00 to	58.00
No. 2 bundles	25.00 to	28.00
No. 1 busheling	55.00 to	58.00
Machine shop turnings	13.00 to	16.00
Mixed borings and turnings	18.00 to	21.00
Shoveling turnings	10.00 to	13.00
Cast iron borings	15.00 to	18.00
Cut structural & plates,		
2 ft. and under	92.00 to	95.00
Low phos. punchings plate	92.00 to	95.00
Drop forge flashings	43.00 to	46.00
Foundry steel, 2 ft. & under	66.00 to	69.00
No. 1 ** hvy. melting	56.00 to	59.00
Rails, 2 ft. and under	83.00 to	86.00
Rails, 18 in. and under	87.00 to	90.00
Steel axle turnings	56.00 to	59.00
Railroad cast	87.00 to	90.00
No. 1 machinery cast	68.00 to	88.00
Cupola cast	55.00 to	58.00
Stove plate	51.00 to	54.00
Stainless		
18-8 bundles	375.00 to	385.00
18-8 turnings	325.00 to	335.00
430 bundles	80.00 to	85.00

Buffalo

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	$ 50.00 to	$ 51.00
No. 2 hvy. melting	40.00 to	41.00
No. 1 busheling	62.00 to	63.00
No. 1 dealer bundles	62.00 to	63.00
No. 2 bundles	30.00 to	31.00
Machine shop turnings	15.00 to	16.00
Mixed boring and turnings	15.00 to	16.00
Shoveling turnings	21.00 to	22.00
Cast iron borings	23.00 to	24.00
Low phos. plate	77.00 to	78.00
Structural and plate		
2 ft. and under	79.00 to	80.00
Rails, 2 ft. and under	79.00 to	80.00
Scrap rails, random lgth.	65.00 to	66.00
No. 1 machinery cast	76.00 to	77.00
No. 1 cupola cast	58.00 to	59.00

St. Louis

No. 1 hvy. melting	$ 45.00 to	$ 46.00
No. 2 hvy. melting	34.00 to	35.00
Foundry steel, 2 ft.	43.00 to	44.00
No. 1 dealer bundles	45.00 to	46.00
No. 2 bundles	29.00 to	30.00
Machine shop turnings	13.00 to	13.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	28.00 to	29.00
No. 1 ** hvy. melting	48.00 to	49.00
Rails, random length	52.00 to	53.00
Rails, 18 in. and under	65.00 to	66.00
** specialties	65.00 to	66.00
Cupola cast	71.00 to	72.00
Heavy breakable cast	49.00 to	50.00
Stove plate	86.00 to	87.00
Steel car wheels	75.00 to	76.00
Railroad rails	64.00 to	65.00
Unstripped motor blocks	58.00 to	59.00

Birmingham

No. 1 hvy. melting	$ 70.00 to	$ 71.00
No. 2 hvy. melting	67.00 to	68.00
No. 1 dealer bundles	71.00 to	72.00
No. 2 bundles	45.00 to	46.00
No. 1 busheling	71.00 to	72.00
Shredder scrap	84.00 to	85.00
Machine shop turnings	25.00 to	26.00
Shoveling turnings	37.00 to	38.00
Cast iron borings	35.00 to	36.00
Electric furnace bundles	66.00 to	67.00
Elec. furnace, 3 ft. & under	66.00 to	67.00
Structural and plate, 2 ft.	85.00 to	86.00
Structural and plate, 4 ft.	82.00 to	83.00
No. 1 ** hvy. melting	82.00 to	83.00
Scrap rails, random lgth.	77.00 to	78.00
Rails, 2 ft. and under	91.00 to	92.00
Angles and splice bars	83.00 to	84.00
No. 1 cupola cast	82.00 to	83.00
Unstripped motor blocks	75.00 to	76.00

Cincinnati

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	$ 42.00 to	$ 43.00
No. 2 hvy. melting	39.00 to	40.00
No. 1 dealer bundles	43.00 to	44.00
No. 2 bundles	23.00 to	24.00
Machine shop turnings	3.00 to	4.00
Shoveling turnings	5.00 to	6.00
Cast iron borings	12.00 to	13.00
Low phos. 18 in. and under	75.00 to	76.00
Rails, random length	53.00 to	54.00
Rails, 2 ft. and under	67.00 to	68.00
No. 1 cupola cast	53.00 to	54.00
Heavy breakable cast	21.00 to	22.00
Drop broken cast	68.00 to	69.00

New York

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	$ 44.00 to	$ 45.00
No. 2 hvy. melting	35.00 to	36.00
No. 2 dealer bundles	20.00 to	24.00
Mixed borings and turnings	10.00 to	11.00
Machine shop turnings	4.00 to	6.00
Shoveling turnings	10.00 to	12.00
Clean cast chem. borings	35.00 to	36.00
No. 1 machinery cast	79.00 to	80.00
Mixed yard cast	50.00 to	51.00
Heavy breakable cast	10.00 to	12.00
Stainless		
18-8 prepared solids	520.00 to	540.00
18-8 turnings	420.00 to	440.00
430 prepared solids	90.00 to	110.00
410 solids	80.00 to	90.00

Boston

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	$ 49.00 to	$ 51.00
No. 2 hvy. melting	39.00 to	41.00
No. 1 dealer bundles	51.00 to	53.00
No. 2 bundles	32.00 to	34.00
No. 1 busheling	57.00 to	59.00
Shredder scrap	59.00 to	61.00
Machine shop turnings	10.00 to	12.00
Shoveling turnings	18.00 to	20.00
No. 1 machinery cast	75.00 to	80.00
Mixed cupola cast	42.00 to	44.00
Heavy breakable cast	8.00 to	10.00

San Francisco

No. 1 hvy. melting	$ 38.00 to	$ 40.00
No. 2 hvy. melting	32.00 to	34.00
No. 1 dealer bundles	29.00 to	31.00
No. 2 dealer bundles	17.00 to	19.00
Machine shop turnings	8.00 to	9.00
Cast iron borings	8.00 to	9.00
No. 1 cupola cast	80.00 to	82.00

Los Angeles

No. 1 hvy. melting	$ 40.00 to	$ 42.00
No. 2 hvy. melting	33.00 to	35.00
No. 1 dealer bundles	31.00 to	33.00
No. 2 dealer bundles	16.00 to	18.00
Machine shop turnings	13.00 to	14.00
Shoveling turnings	10.00 to	11.00
Cast iron borings	8.00 to	9.00
Elec. furnace, 1 ft. and under (foundry)	70.00 to	72.00
No. 1 cupola cast	72.00 to	74.00

Seattle

No. 1 hvy. melting	60.00 to	62.00
No. 2 hvy. melting	51.00 to	53.00
No. 2 bundles	35.00 to	37.00
No. 1 cupola cast	89.00 to	90.00
Mixed yard cast	80.00 to	82.00

Hamilton, Ont.

Brokers buying prices per gross ton on cars	
No. 1 hvy. melting	$ 71.00
No. 2 hvy. melting, cut 2 ft. and under	63.00
No. 1 dealer bundles	69.00
No. 2 bundles	47.00
Mixed steel scrap	45.00
Bush. new fact. prep'd	71.00
Bush. new fact. unprp'd	60.00
Machine shop turnings	31.00
Short steel turnings	31.00
Mixed borings and turnings	18.00
Cast scrap	87.00

Houston

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	$ 67.00 to	$ 68.00
No. 2 hvy. melting	54.00 to	55.00
No. 2 bundles	40.00 to	41.00
Machine shop turnings	13.00 to	14.00
Crushed turnings	30.00 to	31.00
Shredder scrap	76.00 to	77.00
Cut structural plate, 2 ft. and under	96.00 to	97.00
Cut structural plate, 5 ft. and under	80.00 to	81.00
Unstripped motor blocks	60.00 to	61.00
Cupola cast	84.00 to	85.00

PRODUCER KEY
With Principal Offices

A7 Armco Inc., Middletown, Ohio
A8 Atlantic Steel Co., Atlanta, Ga.
A11 Atlantic Wire Co., Branford, Conn.

B1 Baron Drawn Steel Corp., Toledo, Ohio
B3 Bethlehem Steel Corp., Bethlehem, Pa.
B4 Blair Strip Steel Co., New Castle, Pa.
B5 Bliss & Laughlin Steel Co., Harvey, Ill.

C6 CF&I Steel Corp., Pueblo, Colo.
C10 Copperweld Steel Co., Warren, Ohio
C16 Connors Steel Co., Birmingham, Ala.
C20 Calumet Steel Div., Chicago Heights, Ill.

D1 Detroit Strip Div., Cyclops Corp.

E4 Elliot Bros. Steel Co., New Castle, Pa.

F1 Firth Sterling, Inc., McKeesport, Pa.

G2 Granite City Steel Div., National Steel Corp., Granite City, Ill.
G3 Great Lakes Steel Div., National Steel Corp., Ecorse, Mich.
G4 Greer Steel Co., Dover, Ohio
G5 Green River Steel Corp., Owensboro, Ky.
G6 Gibraltar Steel Corp., Buffalo, N. Y.
G7 Georgetown Steel Corp., Georgetown, S.C.

H1 Hercules Drawn Steel Corp., Livonia, Mich.

I2 Ingersoll Steel Div., Newcastle, Ind.
I3 Inland Steel Co., Chicago
I4 Interlake Steel Corp., Chicago

J2 Jessop Steel Corp., Washington, Pa.
J3 Jones & Laughlin Steel Corp., Pittsburgh
J4 Joslyn Mfg. & Supply Co., Chicago
J5 Judson Steel Corp., Emeryville, Calif.

K2 Keystone Consolidated Industries, Inc.
K3 Kentucky Electric Steel Co., Ashland, Ky.
K5 Kemco Div., Foote Mineral Co., Keokuk, Ia.

L2 La Salle Steel Co., Chicago
L3 Lone Star Steel Co., Dallas
L4 Lukens, Inc., Coatesville, Pa.

M2 McLouth Steel Products Corp., Detroit
M8 Mill Strip Products Div., National Steel Service Center, National Steel Corp.
M9 Moltrup Steel Products Co., Beaver Falls, Pa.
M11 Midwest Steel Div., National Steel Corp., Portage, Ind.

N1 Northeast Precision Steel Co., Boston
N4 Northwestern Steel & Wire Co., Sterling, Ill.
N6 Northwest Steel Rolling Mills, Seattle
N9 Nelsen Steel & Wire Co., Chicago
N10 North Star Steel Co., Saint Paul, Minn.

O2 Oregon Steel Mills, Portland, Ore.

P2 Phoenix Steel Corp., Claymont, Del.
P15 Philadelphia Steel and Wire Corp., Phila.

R3 Republic Steel Corp., Cleveland
R4 Ramco Steel Co., Buffalo, N. Y.
R5 Roblin Steel Corp., North Tonawanda, N.Y.
R7 Rome Strip Steel Co., Rome, N. Y.

S1 Sharon Steel Corp., Sharon, Pa.
S7 Stanley Works, New Britain, Conn.
S8 Superior Drawn Steel Co., Monaca, Pa.
S10 Seneca Steel Corp., Buffalo, N. Y.
S16 Southern Precision Steel Co., Gulfport, Miss.

T4 Thomas Steel Strip Co., Warren, Ohio
T5 Timken Co., Steel Division, Canton, Ohio
T7 Texas Steel Co., Fort Worth, Tex.
T9 Triumph Electro Corp., Chicago
T10 Tennessee Forging Steel Corp., Harriman, Tenn.
T11 Teledyne Columbia-Summerill, Carnegie, Pa.

U1 United States Steel Corp., Pittsburgh

W3 Weirton Steel Corp., Weirton, W. Va.
W5 Wheeling-Pittsburgh Steel Corp.
W7 Wilson Steel & Wire Co., Chicago
W10 Wyckoff Steel Div., Ampco-Pittsburgh Corp., Pittsburgh
W14 Whittar Steel Strip Div., Whittar Industries, Ltd., Detroit

STEEL SERVICE CENTER PRICES

Price, Dollars per 100 lb

Prices are based on list prices reported to Iron Age by a number of metal service centers deemed representative by Iron Age and their weighted basis in part on the reports received each month. Prices are not intended to reflect the actual transaction prices obtained by any individual metal service center.

Cities* / City Delivery Charge*	Sheets			Strip	Plates	Shapes	Bars		Alloy Bars			
	Hot-Rolled 110 gage	Cold-Rolled 20 gage	Galvanized 16 gage	Hot-Rolled Strip	Plates	Standard Structurals	Hot-Rolled Merchant	Cold Finished	Hot-Rolled 8620 As Rolled	Hot-Rolled 4140 Annealed	Cold Drawn 8620 As Rolled	Cold Drawn 4140 Annealed
Atlanta	26.73	33.35	34.32	28.05	25.93	22.82	20.60	30.10	32.73	47.49	69.20	71.73
Baltimore	26.68	31.26	36.45	33.24	31.57	28.09	23.33	34.51	50.01	53.80	63.23	68.52
Birmingham	25.26	29.80	36.01	28.36	24.31	22.93	21.90	30.41	47.60	55.75	67.68	72.90
Boston	34.06	40.01	46.21	43.90	32.16	29.30	24.56	34.06	40.34	42.88	54.25	57.37
Buffalo	30.83	36.17	42.58	36.50	29.52	25.44	20.81	31.38	39.37	40.77	48.90	55.15
Chicago	28.50	35.40	38.61	25.56	22.48	19.53	18.85	26.11	30.52	38.51	46.56	51.45
Cincinnati	29.45	35.54	38.49	26.30	23.33	19.48	18.23	27.50	32.54	39.67	46.83	51.43
Cleveland	28.26	34.70	38.19	33.16	22.48	22.85	19.62	29.49	35.52	39.71	47.08	52.82
Denver	31.17	37.95	36.91	33.51	26.35	23.80	21.04	36.91	48.83	54.81	65.53	68.73
Detroit*	29.19	36.77	38.94	25.45	23.38	20.10	18.61	27.48	32.43	39.32	46.89	52.03
Houston	27.44e	29.20	32.50	35.63	25.65	25.59	22.29	38.21	44.31	49.74	58.55	64.68
Kansas City	30.46	37.41	39.55	30.43	26.05	22.96	18.86	32.32	37.93	42.23	49.31	53.41
Los Angeles	26.80	31.55	37.59	30.38	27.00	31.65	27.14	36.20	49.16	54.01	62.73	69.08
Memphis	24.11	33.01	33.91	28.31	25.09	23.75	21.20	31.84	35.11	46.81	59.41	67.90
Milwaukee	28.75	35.14	38.38	27.64	23.53	20.88	18.62	26.29	32.16	39.00	46.05	51.44
New York	32.15	38.95	43.01	39.80	31.59	24.64	22.02	34.47	40.58	43.90	51.43	54.76
Philadelphia	27.82	39.40	41.82	39.92	26.95	26.43	22.26	30.28	40.82	44.57	54.65	59.04
Pittsburgh	39.43	41.21	45.00	39.87	36.50	29.75	27.74	28.61	36.77	41.49	49.48	52.64
Portland	28.70	31.80	38.35	32.98	33.56	34.05	27.09	39.72	48.09	54.65	70.03	.....
San Francisco	26.70	32.08	37.73	30.55	26.40	29.46	26.71	36.80	49.00	54.54	63.48	68.51
Seattle	28.00	30.46	37.71	29.37	21.90	27.00	26.70	37.27	51.31	58.55	69.33	73.01
Spokane	21.04	30.91	36.14	34.44	33.00	33.23	23.00	40.10	41.51	44.46	.....	56.86
St. Louis	28.84	32.19	37.87	31.01	22.84	20.99	19.18	30.43	36.40	40.38	47.45	52.23
St. Paul	28.60	34.07	36.01	24.78	22.82	31.74	18.68	30.28	35.82	39.55	46.67	51.85

Base Quantities: All HR products may be combined for quantity. Hot-rolled sheet: 10 ga x 36 x 96—120. Cold-rolled sheet: 20 ga x 36 x 120. Galv. sheet—16 ga x 36—120. Hot-rolled strip—1/8" x 1". Plate 1/4" x 84". Shapes—I Beams 6 x 12.5. Hot-rolled bar—Rounds 3/4-2 15/16. Cold finished bar—C 1018—1" rounds. Alloy bar—Hot-rolled 8620—1 5/8" round. Cold drawn—1" round. Hot-rolled 4140—1 5/8" round. Cold drawn—1" round. Check local supplier for additions or deductions from base.

*Prices at all points include metropolitan delivery charges.

Codes identify Producers listed on p. 64. (Prices quoted are mill base prices in cents per pound unless otherwise noted and do not reflect extras or surcharges.)
N.A. = Not available.

Billets, Blooms, Slabs

(Dollars per net ton)

Carbon Rerolling, Midwest	
W5	$366.00
N4	$366.00
West	
C6	$346.00
Carbon Forging, East	
B3(2)	$473.00
C10, U1	$473.00
R3	$453.00
Midwest	
R3, W5	$453.00
U1	$473.00
S1, I3	$473.00
C10	$473.00
K2	$473.00
West	
C6	$420.00
Alloy, East	
R3	$492.00
B3	$512.00
U1-C10	$512.00
Midwest	
W5	$492.00
U1, I3	$512.00
C10	$512.00
R3	$492.00
S1	$512.00
West	
C6	$469.00

Structurals

Carbon, East	
B3	22.90
J3	23.90
Midwest	
C20	22.90
W8	22.90
I3	23.90
T10	23.90
N4	23.90
South	
C16	23.90
T10	22.90
High Strength, Low Alloy	
East	
B3	22.90
J3	23.90
Midwest	
N4	23.90
W8	24.15
I3	23.90
South	
C16	23.90
Wide Flange, Carbon, East	
B3	22.90
U1	22.75
J3	23.90
Midwest	
U1	22.75
N4	23.90
I3	23.90
Wide Flange, High Strength Low Alloy	
East	
U1	24.30
Midwest	
U1	24.30

Strip

Hot Rolled, Carbon, Cut 1 Edge—all widths, East	
U1, B3	23.75
J3	22.05
Midwest	
D1	22.05
I4	22.85
J3, W3	22.05
G2, G3	23.45
N4	22.55
W5, S1	23.75
U1, A7	23.75
I3, B3	23.75
M2	22.05
R3	22.05
South	
R3	22.05
Cold Rolled, Carbon Max. .25%, East	
E4	29.75
S10	29.60
P15	24.80
B4	36.60
G6	36.175
Midwest	
I4	38.30
W14	32.80
J4	34.05
S1	37.05
High Strength, Hot Rolled, Low Alloy, Cut Edge & Mill Edge All widths (plus extras)*	
Midwest	
M2, R3	22.05
W3, J3	22.05
G2, G3	23.45
S1	23.75
A7	25.35
South	
R3	22.05
High Strength, Cold Rolled, Low Alloy, Mill Edge	
Midwest	
S1	37.05
Alloy, Hot Rolled, Midwest (plus extras)*	
S1	26.10
I4	25.20
Alloy, Cold Rolled East (plus extras)*	
E4,M8	43.35
B4	49.75
P15	32.10
Midwest	
I4	44.30
S1	44.80

Sheets

Hot Rolled, Carbon (18 Ga & Hvy), East	
B3	23.75
J3	22.05
U1	23.75
Midwest	
M2, R3, W3	22.05
D1, J3	22.05
G2, G3	23.45
I4	22.45
U1, W5	23.75
S1, B3	23.75
I3, A7	23.75
West	
U1	24.25
South	
R3	22.05
Cold Rolled, East, Class 1	
B3(2)	28.15
J3	26.15
U1	28.15
Midwest	
R3, M2, W3	26.15
G2, G3, M11	27.85
J3	26.15
D1	26.15
U1, W5	28.15
S1, B3	28.15
I3, A7	28.15
West	
U1	28.65
South	
R3	24.65
Galvanized (hot dipped), East	
B3(2)	30.30
U1	30.30
Midwest	
J3, D1, W3	28.00
R3, Y1	28.00
G2, M11	30.00
U1, W5	30.30
S1	30.30
I3	30.30
A7	30.30
West	
U1	30.80
South	
R3	28.00
Enameling, Midwest	
U1, S1	29.65
I3, A7	29.65
J3	27.65
Long Terne, Midwest	
W5, A7, U1	31.65
R3	29.35

Wire Rod

East	
B3(2)	22.35
Midwest	
N4, K2	22.35
U1	24.10
A7	22.00
West	
C6	21.45
South	
G7	22.35

Tinplate

Electrolytic Tinplate, Single Reduced (70 lb)	
East	**per base box**
J3	26.29
U1	28.99
Midwest	
U1	28.99
J3	26.29
M11	27.54
W3	26.29
W5	28.99
West	
U1	29.49
South	
U1	28.99
Double Reduced (55 lb)**	
Midwest	
M11	21.95
J3	21.49
U1	23.38
W3	21.49
W5	23.38
West	
U1	23.88
South	
U1	23.38
Black Plate, Single Reduced (70 lb)*	
East	
B3	24.81
Midwest	
J3, W3	24.01
I3	24.57
W5	25.55
U1	26.27
M11	26.27
West	
U1	26.27
Double Reduced (55 lb)	
East	
B3	20.49
Midwest	
W5, M11, U1	20.49
J3	18.93
W3	18.93
West	
U1	20.49
South	
U1	20.49

*75 lb—base weight extra 69¢
**50 lb—base weight extra $1.40

Bars

Carbon Steel, Hot Rolled (Special quality)	
East	
R3, K3, R5	25.80
J3	25.80
U1	27.05
C10	27.05
B3	27.05
Midwest	
I4	26.00
U1, I3	27.05
R3, T10	25.80
C20, N4	25.80
K2	25.80
A7	20.25
West	
C6	24.45
South	
A8	20.65
C16	25.80
Cold Finished Carbon, East	
A11	22.15
R3	33.75
T11, S8	31.00
J3(4), L2	31.00
M8, W10	31.00
N1	24.475
R4, B4	33.25
C10	31.00
Midwest	
W10, R3	33.25
J3	31.00
B1	33.45
L2	30.75
N9	31.00
W14	22.20
B5, M9	34.75
West	
R3	37.15
South	
J3	34.00
C16	24.40
J3	31.95
Alloy, Hot Rolled, East	
R5, K3	27.95
R3, J3	27.95
U1	29.20
B3	29.20
C10	29.20
Midwest	
R3	27.95
I3, C10, U1	29.20
I4	27.35
A7	20.25
West	
C6	26.60
South	
A8	22.00
Alloy, Cold Drawn, East	
L2	35.20
R3, N1	37.90
R4	37.10
J3, W10, L2	34.85
T11, S8	34.85
C10	34.85
Midwest	
R3	37.35
J3, W10, C10	34.85
B1	37.30
N9	34.85
L2	34.85
B5, M9	38.60
West	
R3	40.75
South	
J3	35.85
C16	28.00

Plates

Carbon Steel, East	
B3	23.25
I4, U1	25.75
P2	23.25
J3	26.75
Midwest	
B3	23.25
I3	25.75
J3, A7	22.80
U1, I4, S1	25.75
R3	26.75
West	
U1	25.75
O2	23.00
South	
R3	25.75
U1	25.75
Alloy, East	
B3	31.05
U1, I4	33.55
P2	33.55
J3	34.55
Midwest	
B3	31.05
I4, U1	33.55
West	
O2	31.00
South	
U1	33.55

Wire

Carbon Steel Wire, East	
B3	27.10
A11	22.15
Midwest	
R3	24.60
N4, W7	27.40
K2	24.20
South	
A8	22.85
West	
C6	24.95

WEAK MACHINERY LINES CAUSE DURABLE ORDERS DIP

It was bad news for machinery builders in April. Sharp declines in their incoming new orders, almost alone, accounted for a 0.2 pct decline in total durable goods orders during the month.

The weak April showing in machinery orders accounted directly for an almost $2 billion decline in orders received by capital goods producers in nondefense industries.

This year is turning out to be a very disappointing one for capital outlays. Orders received by nondefense capital goods producers in April were down a steep 15 pct just from February.

The good news in orders in April came in transportation equipment and primary metals industries. Orders received by producers of aircraft, missiles and parts were up a stunning 27 pct in April. This was a mix of defense and commercial business that poured in during the month. It was an orders 'bulge' not likely to be sustained at anywhere near that rate in future months.

The step-up in orders received by metals producers in April was shared by both steel mills and nonferrous metals producers. Primary metals producers' orders were up by almost 10 pct.

Still, metals orders have largely been on a plateau for a long time. Note in the table here that metals orders in April 1984 were higher than the latest month's level.

Despite declines and flattening of orders in a number of durable goods lines, inventories have been held in control. Stocks are not building up to the point where future sharp business-slowing cutbacks might have to be made in the months ahead.

Backlogs are holding up well. This is due to orders and shipments moving closely together. Also, it indicates that order cancellations are not coming in at a dangerous pace.

Billions of Dollars, Seasonally adjusted Monthly Total, unless otherwise noted Source: U.S. Dept of Commerce		Latest Month or Qtr.	Previous Month or Qtr.	Same Period Year Ago
CAPITAL EXPENDITURES (Annual Rates)				
U.S. Industry, Total	1st Qtr.*	$380.1	$367.2	$337.5
Manufacturing, Total	1st Qtr.*	151.0	146.2	130.0
Manufacturing, Durable Goods	1st Qtr.*	74.0	71.1	61.3
Mining Industry	1st Qtr.*	16.2	16.9	17.6
KEY INDICATORS, Durable Goods Manufacturing				
New Orders	April	99.5	99.7	97.3
Shipments	April	102.1	102.2	95.5
Inventories	April	192.5	192.4	178.4
Unfilled Orders	April	344.7	347.2	339.9
NEW ORDERS, METALWORKING				
Capital Goods Producers, Nondefense Industries	April	25.3	27.2	26.3
Capital Goods Producers Defense Industries	April	6.1	6.2	5.1
Primary Metals, Total	April	11.0	10.0	11.7
Steel (SIC 331)	April	4.8	4.1	4.7
Iron & Steel Castings (SIC 332)	April	1.3	1.2	1.4
Nonferrous Metals	April	4.9	4.7	5.6
Nonelectrical Mach.-Equip. Industries, Total	April	16.9	18.8	17.2
Engines & Turbines	April	1.0	1.1	1.3
Farm Machinery & Equipment (Shipments)	April	0.9	1.0	0.9
Construction, Mining & Mat. Hdlg. Equip	April	3.0	3.1	2.7
General Industrial Machinery	April	1.5	1.5	1.4
Fluid Power Equipment** (Index-1972=100)	April	295.0	282.0	310.0
Metalworking Machinery	April	0.9	1.1	0.9
Machine Tools, Total ($Mill., Unadjusted)***	April	183.5	279.3	253.1
Machine Tools, Metalcutting***	April	122.1	227.0	179.8
Machine Tools, Metalforming***	April	61.4	52.3	73.3
Electrical Mach. & Equip. Industries, Total	April	14.2	15.9	15.2
Elec. Transmission Equip. & Ind. Apparatus	April	1.9	2.1	2.0
Household Appliances	April	1.3	1.3	1.3
Communication Equipment	April	5.2	6.3	4.5
Transportation Equipment, Total	April	23.9	22.5	23.1
Motor Vehicles & Parts (Shipments)	April	16.5	16.2	15.2
Aircraft, Missiles & Parts	April	6.3	5.0	6.5
Shipbuilding & Military Tanks	April	0.4	0.6	0.5
Fabricated Metal Products, Total	April	13.4	13.3	10.9
Instruments, Total	April	4.9	4.6	4.6

*Est —Commerce Dept, **Source: National Fluid Power Assn., ***Source: NMTBA